

# PUBLIC HEALTH REPORTS.

VOL. XXVI.

OCTOBER 20, 1911.

No. 42.

## THE CHOLERA SITUATION.

There has been little change in the cholera situation during the past week. The disease continues prevalent in Italy. Limited outbreaks continue to be reported in various localities in Austria-Hungary. The disease is present at various points in Russia, although to a much more limited extent than during the autumn of 1910. The disease is also present in Turkey in Europe, and an increasing number of cases are occurring in Asia Minor. The outbreak in Tunis is increasing. According to last advices the disease was still present at Marseille, France.

Precautions for the protection of the United States are being continued. Officers of the Public Health and Marine-Hospital Service are being retained at foreign ports at which emigrants from cholera-infected localities embark for the United States. The examination of immigrants on arrival at United States ports for the detection of cholera carriers is still being carried on.

### NEW YORK.

#### Vessels Arriving at Quarantine.

Passed Asst. Surg. von Ezdorf reports as follows:

The steamship *Lorraine* which sailed from Havre September 30 arrived at New York October 7. Forty-four steerage passengers Italian were removed to Hoffmann Island for bacteriological examination. The examination proved negative. The steamship *Cala-bria*, from Italian ports, arrived October 8; bacteriological examination negative. The *Duca d'Aosta*, from Genoa and Naples, arrived October 9 and was held pending bacteriological examination. The *Virginie* and *Chicago*, from Havre, arrived October 9. Fifty-seven Italian steerage passengers on the *Virginie* and 50 on the *Chicago* were removed to Hoffmann Island. The *Berlin*, from Genoa, Naples, and Gibraltar, arrived October 10, was held pending examination of steerage passengers. The *Louisiana*, from Naples and Almeria, arrived October 10. Thirteen steerage passengers were removed to Hoffmann Island. The examination of passengers on the *Duca d'Aosta*, *Virginie*, *Chicago*, *Berlin*, and *Louisiana* proved negative.

## NOTIFICATION OF POLIOMYELITIS.

Because of the unusual prevalence of poliomyelitis in the United States during the last few years the subject is one of general interest to health authorities. A commission appointed by the Academy of Medicine of Paris to report upon the advisability of making obligatory in France the notification of this disease made its report on July 11, 1911. A translation of the report follows:

**OBLIGATORY NOTIFICATION OF POLIOMYELITIS (INFANTILE PARALYSIS).<sup>1</sup>**

Report presented to the Paris Academy of Medicine by Arnold Netter in the name of a commission composed of MM. Roux, Chantemesse, Chauffard, Roger, and Netter.<sup>2</sup>

Translated by W. C. Rucker, Passed Assistant Surgeon, Public Health and Marine-Hospital Service.

The Academy of Medicine appointed a commission on the 30th of May last to discuss the expediency of classifying poliomyelitis, or infantile paralysis, among the diseases in which notification is obligatory.

Article 4 of the law of February 15, 1902, states that "The list of diseases is prepared by a decree of the President of the Republic, promulgated upon the report of the Minister of the Interior by advice of the Academy of Medicine and the consulting committee on public hygiene of France, and may be revised in the same manner."

In accordance with the above, the decree of February 10, 1903, has established a list of 13 diseases in which notification is obligatory and 9 diseases in which notification is optional.

Since 1903 the academy has expressed its sentiments on several occasions regarding the expediency of adding other diseases to the first list.

It has gone on record regarding the obligation of notification in recurrent fever<sup>3</sup> and the affections due to trypanosomes and piroplasms<sup>4</sup> in Algeria and the colonies. It has advised that mention be made of paratyphoid infections along with reports of typhoid fever.<sup>5</sup> Finally, following a communication by M. Widal, it urged the notification of Malta fever<sup>6</sup> in France.

Your commission has charged me with presenting to you a final report upon the notification of poliomyelitis in France.

*The sanitary legislation of other countries has ere this prescribed notification.<sup>7</sup>* On August 25, 1905, the King of Sweden decreed that in so far as they concern the disease called acute infantile paralysis the laws in force relative to the diseases contemplated by section 20, article 1, of the royal ordinances upon the measures against the introduction and propagation of contagious<sup>8</sup> diseases into the Kingdom, dated March 19, 1875, shall be applied.

The same year notification was imposed in Norway.

<sup>1</sup> From the Bulletin of the International Office of Public Hygiene, Paris, Tome III, 1389-1399, August, 1911.

<sup>2</sup> Meeting of the Academy of Medicine, July 11, 1911.

<sup>3</sup> Bulletin of the Academy, meeting Dec. 17 and 24, 1907.

<sup>4</sup> Bulletin of the Academy, meeting Jan. 3, 1911.

<sup>5</sup> Bulletin of the Academy, meeting Nov. 22, 1910.

<sup>6</sup> Bulletin of the Academy, meeting Nov. 15, 1910.

<sup>7</sup> Throughout the translation italics have been used as in the original report.

<sup>8</sup> The diseases in which the law requires notification in Sweden are plague, cholera, smallpox, typhus, typhoid fever, scarlatina, diphtheria, dysentery, and leprosy. Notification is imposed upon the attending physician, the head of the family, and the members of the clergy.

A number of States in the United States have successively enacted similar measures requiring notification of suspected cases, quarantine of patients and their contacts, disinfection of the discharges during the course of the disease, and disinfection of the surroundings after the termination of the disease—Massachusetts, New York, Pennsylvania, Minnesota, Virginia, Iowa, Nebraska, Kansas, the District of Columbia.<sup>1</sup> Similar measures have been prescribed in various cities in Ohio, Connecticut, New Jersey, etc.

In the course of the months of September and October, 1909, notification was made obligatory in many Austrian Provinces, Upper Austria, Styria, Carinthia, Carniola, Salzburg, Lower Austria, and the Tyrol, etc.

The same year, 1909, the German authorities judged necessary the same measures in the Provinces of Westphalia, and the bulletins of the sanitary office show that notification is made in all Germany.

The measures which are proposed for the French Government are, as we have seen, imposed by foreign nations, but to justify the notification of poliomyelitis we will invoke more direct arguments.

We will show in fact that a contagium unquestionably exists in the dissemination of poliomyelitis; that experimental pathology as well as epidemiology has specified the usual mode of transmission and indicated the means to oppose the progress of the disease. We shall furnish proof of the efficacy of the measures taken after notification.

## I.

The set of questions put to physicians by the minister of the interior has not been followed by sufficient responses to give a precise figure to the subject of *the importance of poliomyelitis in France*, in the last two years. Your reporter has been able to affirm that since the summer of 1909<sup>2</sup> its frequency in Paris and its environs has been much greater than previously, and it has been easy to gather an unusual number of cases. It has been possible to establish that various parts of France have also been stricken and one can certainly fix at several hundred the number of cases of this disease in 1910 as in 1909. The number is evidently smaller than in the United States<sup>3</sup> (more than 6,000 in 1910) or in the Rhine Provinces and Westphalia in 1909 (more than 2,000) or the Austrian Provinces in 1908 and 1909 (more than 1,500). It is none the less alarming if one takes account of the consequences of the disease which often induce grave and persistent deformities and which is followed by death in more than a tenth of the cases.

Poliomyelitis is not only infectious, but is also contagious. Difficult of demonstration in the large cities and in countries having a dense population, transmission by contact is, on the contrary, evident in localities having a sparse population among which communication is rare and easy of control. Your reporter has been able to follow the mutual connections in many of the cases in the departments and in the suburbs of Paris.

<sup>1</sup> Poliomyelitis has been made reportable in California, District of Columbia, Idaho, Maine, Massachusetts, Minnesota, New Jersey, New York, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Washington, and Wisconsin.—Editor.

<sup>2</sup> Arnold Netter, Medical Society of the Hospitals of Paris, Nov. 12, 1909.

<sup>3</sup> Arnold Netter, Bulletin of the Academy of Medicine of May 31, 1910-May 23, 1911.

The contagion manifests itself first of all *by the coexistence of a succession of cases in a family or in a house*. We have personally observed this succession in 16 families. In Sweden in 1905, in not less than 28 families out of 100, the disease attacked more than one person. In upper Austria this proportion reached 38 per hundred and in the State of Nebraska, in 1909, the number was 40 per hundred. In the latter State the proportion of families where all the children without exception have been attacked is also high.

We have been able to gather in France, as have other authors in Sweden, Norway, the United States, Austria, Germany, etc., a number of observations proving that *persons have been attacked by poliomyelitis several days after a short and single contact with a patient*, and it is thus that the disease has been transported great distances (from Saint-Florentin to Paris; from the neighborhood of Salies de Bearn to Bordeaux; from Paris to the Department of Morbihan, etc.).

The contagion is not only taken from patients or convalescents. *The intervention of healthy persons, carriers of germs*, is often manifest, and we have noted many unquestionable examples.

Wickmann has shown how the *schools are able to serve for the dissemination of the disease*. Children who attend the school and carry the contagion to their fellows may remain themselves free from the disease. Your reporter has noted analogous facts, and they are not missing in the German, Austrian, and American reports.

In other localities and by a similar mechanism, *markets, fairs, and public gatherings* contribute to the dissemination of the disease.

We will cite further convincing facts of the *transmission by objects* which have been in contact with patients.

Experimental pathology permits us to analyze with greater precision the modes of transmission of poliomyelitis.

Landsteiner and Popper were the first to show, in the year 1908, the possibility of reproducing in the monkey by inoculating its nervous centers, a disease presenting the evolution, symptomatology, and lesions of human poliomyelitis. Since then the discoveries have multiplied and the laboratories of France, Austria, Germany, and the United States have vied with one another in making valuable contributions to the subject.

Although we have not succeeded as yet in seeing and cultivating the pathogenic agent of poliomyelitis, we know that it belongs in the category of ultra-microscopic organisms or *filtrable viruses*, a class which includes a great many species pathogenic for man (rabies, yellow fever) or for animals (rabies, pleuro-pneumonia, foot-and-mouth disease, and distemper.)

The passage of the virus of poliomyelitis through porcelain bougies permits its separation from germs of larger size, and it is thus that Flexner and Lewis have been able to furnish experimental proof of the *presence of the virus in the nasal mucous membrane of the monkey*, and that Landsteiner and Levaditi found it in the *saliva of the monkey and on the surface of the tonsils in man*.

The virus is able in these locations to preserve its activity for a long time after the onset of the disease. Osgood and Lucas have demonstrated the virulence of the nasal mucous membrane of a paralyzed monkey inoculated five and one-half months previously. More recently, also, Osgood has succeeded in producing a poliomyelitis



by inoculating the adenoid growths removed from a child which was paralyzed more than six months previously.

Regarding the *entrance of the virus to the body*, it is accomplished by various routes, by the nasal fossæ (Leiner and Wiener, Flexner and Lewis), the trachea and bronchi, and the digestive route. It may travel along the nerves, etc.

More resistant than the microbes of cerebro-spinal meningitis, the virus of poliomyelitis resists desiccation 15 and sometimes 28 days.<sup>1</sup> It may thus be carried by dust, preserving its activity upon its particles.<sup>2</sup> Flexner and Clark<sup>3</sup> have been able to demonstrate the transference by flies. Flies placed on the surface of the medulla of an infected animal still carried the virulent principles after 48 hours.

It is thus shown that the contagiousness of poliomyelitis is incontestable. One might object that this contagiousness is relatively slight, that it is infinitely less than that of the eruptive fevers for example. We do not contradict this. There are a number of examples in which in spite of the absence of all precautions the first case of poliomyelitis was followed by no others, and that in a family including several children living in a single room and using the same bed. Although in certain epidemics there have been 40 per cent of families having more than one case, in New York the number was 3 per cent.

This contagiousness, often small, should not make us forget the cases where contact is evident, and the latter demand that we take prophylactic measures. Are these not properly imposed in cerebro-spinal meningitis, which, like poliomyelitis, often remains without secondary cases and presents only rarely a manifestly contagious character?

## II.

In order to justify the classification of poliomyelitis among the reportable diseases, it is not sufficient to demonstrate that the disease is infectious and contagious; it is necessary also that the notification to the public authorities should be followed by efficient prophylactic measures.

The most important of these measures are isolation and disinfection. Both find their application in infantile paralysis.

We have seen that the contagion is not distributed solely by patients and convalescents. We must also take account of healthy subjects, carriers of germs, whose rôle has been established above.

*Notification of cases of poliomyelitis will permit the interdiction of school attendance, not only by convalescents, but also by their brothers and sisters and the playmates of the patients.*

Because of the danger from carriers one might go even further, should it be necessary, and impose a quarantine on the friends and associates of patients.

<sup>1</sup> This is done by suspending the medulla in a flask at the bottom of which is placed caustic potash. Exposed in a chopped layer, that is to say under conditions which approach more nearly the transmission under natural conditions, the virus resists desiccation much less. Leiner and Wiener could not discover any virulence after 28 hours exposure.

<sup>2</sup> Neustaedter and Thro, N. Y. Med. Jour., 1911, XCIV, 613-615, have recently reported successful inoculation of monkeys with dust from rooms occupied by patients having poliomyelitis.—W. C. R.

<sup>3</sup> Flexner and Clark. Contamination of the fly with poliomyelitis virus. J. A. M. A. June 10, 1911.

<sup>4</sup> Experimental poliomyelitis has been reproduced almost exclusively upon monkeys. The coincidence of epizootics among various domestic species has been noted many times, but the facts reported have not been precise.

Here is an example of the efficacy of isolation. There is no place where poliomyelitis has made as great ravages as in the State of Nebraska in 1909. A collective inquiry has permitted MacClanahan, of Omaha, to gather 999 cases out of a population of 421,000, or 2.45 per thousand. The number in certain counties has been 0.8 per hundred, 1.46 per hundred, and 3.2 per hundred. The epidemic began in the village of Stromsburg, and, as is frequent in such cases, the diagnosis at first wavered between poliomyelitis and cerebrospinal meningitis. There being no sanitary regulations regarding the matter, no measures were instituted. The Fourth of July celebration disseminated the disease in the neighboring localities and to considerable distances in the State. Therefore, the sanitary authorities, who were called together immediately, decided, July 21, on the placing in absolute quarantine for three months of all the members of the patient's family, exception being made of the head of the family, the breadwinner of the household. The result was unexpected; 12 days later there were no new cases.

The number of cases reported prior to July 4 was 30; from July 4 to the end of the month, 115; from then to the 3d of August, 15 only.

The same measures brought quite as convincing results in other parts of the State, where the quarantine often included all the members of the family without exception.

*The notification of any of the diseases contemplated by article 4 of the law of 1902 entails on the part of the authorities disinfection of the patient's surroundings and articles which he has touched.* Heat usually applied by means of the steam chamber, or formaldehyde vapors, are chiefly used in these operations and act efficiently against the virus of poliomyelitis which is promptly destroyed by heat between 50° and 55° and does not resist the action of formaldehyde (Roemer and Joseph). It is known that the efficacy of the measures of disinfection has been denied in the prophylaxis of cerebrospinal meningitis, the microbes of which resist desiccation very slightly. Similar objection should not be made to disinfection in poliomyelitis where the medulla remains virulent after 24 days of desiccation and from which Flexner and Clark have demonstrated the possibility of transference of the virus by flies. A certain number of epidemiological facts similarly establish the possible transmission of the disease by inanimate objects. For example, Wickmann has cited the case of a woman who fell ill in Stockholm the 25th of September after having copied a drawing made by a convalescent from poliomyelitis at the beginning of September. The illness of the latter began July 27 in a place more than 100 kilometers away. Eichelberg, at Goettingen, noted the unusual frequency of poliomyelitis in shoemakers' families and found that in two of these the children were stricken 9 or 10 days after the father had mended the shoes of children having acute infantile paralysis. In the Austrian reports, many instances are cited of families having a sick child after having moved into an apartment in which the previous occupants had had a case of poliomyelitis.

These latter observations seem to prove the persistence of the virus in dust and would coincide with an observation of Hill. In the city of Winona (Mich.)<sup>1</sup> out of 29 cases reported in July, 27 were

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<sup>1</sup> The author evidently means Minnesota.—W. C. R.

situated on the same dusty street. The city began the careful sprinkling of the streets, after which time no more cases occurred.

*The attending physician will be able, by the use of hygienic precautions, to prevent the spread of the disease.*

Since he knows the contagiousness of the disease, he should instruct the nurse as to the usual precautions to be observed and he should forbid the entrance of other persons into the sick room.

The presence of the pathogenic agent in the nasal fossæ and its probable entrance by that route, permits the hope that antiseptics of the nasal fossæ of patients and their intimates and other persons exposed to the contagion would more or less diminish the risks of contagion. Experiments have shown that the virus of poliomyelitis is slightly resistant to the various disinfectant agents. Menthol, powdered salol, permanganate of potash 2 to 1,000, or 1 per cent hydrogen peroxide may be employed in such cases. The physician should advise the use of such agents in gargles, washes, or powders in the nasal fossæ.

Under the head of prophylaxis he may also order the administration of urotropin. This drug, which becomes transformed into formaldehyde, an agent the activity of which against the virus is demonstrated, appears very quickly after ingestion in the cerebrospinal fluid, and Flexner and Clark believe that its use probably hinders the development of experimental poliomyelitis.

### III.

We have thus demonstrated successively the contagiousness of poliomyelitis and the possibility of efficaciously opposing its progress. The conclusion which follows is that *poliomyelitis should be classed among the reportable diseases.*

It is useless to object that *the disease does not always exhibit a contagious character*, that many of the cases, the great number, for that matter, are not followed by secondary cases. It is enough that contagion is possible, that it is manifest in a certain number of cases. Admitting the difficulty of investigating a disease which is chiefly transmitted by a healthy third person, the conclusion should not be reached that a case occurring apparently without contact has not been received from another case and can not become itself the origin of later cases.

*The difficulty of early diagnosis*, the impossibility of recognizing certain cases simulating the symptomatology of meningitis or other affection may be urged against notification. The proven persistence of the contagion in convalescents shows that notification, even though late, would have its usefulness from the point of view of the measures to be taken with regard to the convalescent and his intimates. The knowledge of reported cases arouses the physician and creates in his mind an early suspicion of poliomyelitis masked by deceptive symptoms.

One might be tempted to *demand the notification of epidemic poliomyelitis and to neglect that for sporadic or common infantile paralysis*, which has always existed in many forms and to which we have not dreamed of attributing a contagious character. There is no distinction between the two diseases. Epidemic poliomyelitis is exactly the same disease as sporadic infantile paralysis. The pathological

anatomy, the clinical findings, the seasonal prevalence, the existence of small family outbreaks creates this belief.<sup>1</sup>

Doubt is no longer possible, since your reporter demonstrated with M. Levaditi that cases of the old type of infantile paralysis present in their blood the same immunizing properties as convalescents from epidemic poliomyelitis.<sup>2</sup> If at certain times poliomyelitis takes on an epidemic character it is because, under the influence of various unknown factors, the virus takes on an activity and the power of great diffusion. In suppressing or in rendering harmless the isolated cases one should reduce the chances of diffusion. This was well recognized by the Scandinavian sanitary authorities where the notification of poliomyelitis is at all times obligatory, though in all Sweden in 1910 there were only reported 4 cases and 2 deaths, and from the 1st of January to the 30th of April, 1911, there were 14 cases with 2 deaths.

Your commission propose that you vote on the following conclusions:

The academy advises the adoption of notification in acute anterior poliomyelitis (infantile paralysis, Heine-Medin disease, etc.).

This notification would apply not only to the typical cases, but also to the doubtful ones.

It would be made at all times, no matter whether the disease was epidemic or not.

It would allow the interdiction of school attendance for three months, and would apply equally to patients and convalescents.

Articles liable to become contaminated by the secretions and excretions of patients should be disinfected during the course of the disease and convalescence. The disinfection of the premises at the close of the illness is equally advisable.

(The conclusions of the report were put to a vote and adopted.)

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<sup>1</sup> Arnold Netter, Medical Society of the Paris Hospitals, Dec. 10, 1909.

<sup>2</sup> Netter and Levaditi: *Comptes rendus de la Soc. de Biologie*, Apr. 9 and May 21, 1910.

# UNITED STATES.

## MUNICIPAL ORDINANCES, RULES, AND REGULATIONS PERTAINING TO PUBLIC HYGIENE.

[Adopted since January 1, 1910.]

### BATTLE CREEK, MICH.

#### MILK—REGULATION OF THE SALE OF.

SECTION I. *Be it ordained by the common council of the city of Battle Creek, That no person, partnership, or corporation shall sell, barter, or traffic in milk in the city of Battle Creek without having first registered and been given a certificate of registration as a legally registered milk dealer.*

SEC. II. Any person, partnership, or corporation desiring to sell, barter, or traffic in milk within the city of Battle Creek shall be permitted to do so by procuring a certificate of registration from the city recorder and signing an agreement to comply with the requirements of this ordinance and any amendments thereto and the rules and regulations as adopted by the board of health relative to the milk supply of the city. The form of application for a certificate of registration shall be substantially as follows:

#### MILK DEALER'S APPLICATION FOR CERTIFICATE OF REGISTRATION.

I, ———, hereby make application for a certificate of registration as a milk dealer in the city of Battle Creek and agree to comply with all the provisions of an ordinance entitled "An ordinance to regulate the milk supply of the city of Battle Creek," and any amendments thereto, and with the regulations of the board of health relative to the same.

Dated, at Battle Creek, Mich., this — day of —, 19—.

———, Applicant.

The form of certificate of registration shall be substantially as follows:

#### MILK DEALER'S CERTIFICATE OF REGISTRATION.

This is to certify that ——— is a legally registered milk dealer in the city of Battle Creek and entitled to dispense milk so long as he complies with the conditions of an ordinance entitled "An ordinance to regulate the milk supply of the city of Battle Creek," and any amendments thereto, and with the regulations of the board of health relative to the same or until this certificate is revoked.

(Signed) ———, Recorder.

Dated, Battle Creek, Mich., this — day of —, 19—.

Approved by ———, Health Officer.

SEC. III. The recorder shall not issue any certificate except with the approval of the health officer.

SEC. IV. It shall be the duty of the recorder to keep a duplicate of each and every certificate issued by him and enter the same in a book kept for that purpose, together with the date, name, and residence or place of business of the person, firm, or corporation to whom the certificate was issued, which said book shall be open for inspection by the public. He shall also cause to be published once a month in one or more of the city papers the name and address of all legally registered milk dealers in the city.

It shall also be the duty of the recorder to procure the necessary books, blanks, and papers to carry into effect the provisions of this ordinance.

SEC. V. No person shall be allowed to dispense any milk in the city of Battle Creek without having in his possession a copy of the certificate under which he claims the right to dispense milk, and the recorder shall furnish to each legally registered person, firm, or corporation a sufficient number of copies of said certificate to enable him to comply with the provisions of this section, and any dispenser of milk in the city of



Battle Creek shall show his certificate to any customer, or duly authorized inspector, whenever requested to do so.

SEC. VI. No person, partnership, or corporation shall sell or deliver or have in his or their possession for sale in the city of Battle Creek any milk which has been watered or adulterated, or which contains any preservative or unhealthful ingredient, constituent, or substance, which has been transported or stored in an unclean manner, or which has been kept at a temperature above 60° F., or which is produced from cows which are kept stabled under unhealthful conditions, or which may be diseased; nor shall any milk be sold or delivered in said city which is procured from any farm or dairy where any contagious or infectious or communicable disease may exist.

SEC. VII. No person, partnership, or corporation shall sell, or deliver, or have in his or their possession for sale in the city of Battle Creek any milk which is shown by analyses made at the city laboratory of samples taken upon three successive days to contain more than 100,000 bacteria per cubic centimeter during the months of July, August, and September of any year, or more than 60,000 bacteria during the other months of the year.

SEC. VIII. No person, partnership, or corporation shall sell, deliver, or have in his or their possession any so-called "special milk," "baby milk," or "guaranteed milk," purporting to be especially adapted for infant feeding which shall be shown upon analysis at the city laboratory to contain more than 10,000 bacteria per cubic centimeter.

SEC. IX. If milk sold or offered for sale under this ordinance as pure milk is shown upon analysis by weight to contain more than 87.50 per cent of watery fluid, or to contain less than 12.50 of milk solids per cent, or less fat than 3 per cent, or if the specific gravity at 60° F. is not between 1.29-1,000 to 1.33-1,000, it shall be deemed to be adulterated. If milk sold or offered for sale under the provisions of this act as skimmed milk has a specific gravity at 60° F. less than 1.032 and greater than 1.038, it shall be deemed to be adulterated.

SEC. X. It shall be the duty of the milk inspector, hereafter named, to inspect or cause to be inspected and analyzed at least twice a month during the months of July, August, and September of each year, and bimonthly during the balance of the year, any milk which shall be kept or offered or exposed for sale within the city of Battle Creek, and for that purpose he shall have free access to all places where milk is kept for sale to obtain sufficient samples of such milk for the purpose of making each inspection, examination, or analysis, and every person selling milk in said city shall upon request forthwith furnish free of charge to said inspector all such necessary samples of milk for such inspection, examination, and analysis, and said inspector shall make such inspection, whenever the board of health requests him to do so, of any milk offered for sale in the said city as may be deemed necessary for the protection of the public health; and no person shall refuse said inspector entrance to his premises for the purpose of applying the tuberculin test, nor shall he conceal any milk so kept for sale from examination by said inspector. Nor shall persons refuse to permit any milk or animals or premises whereon the animals are kept to be viewed and inspected as herein provided, or in any manner hinder or resist said inspector or any person under him in the performance of his duty, and such refusal either by the legally registered milk dealer, or the owner of any cow from whom he obtains milk, shall be sufficient grounds for the recorder to revoke the certificate. The milk inspector shall immediately upon taking samples of milk for analysis place them in suitable receptacles, where they shall be in constant contact with ice until delivered by him to the laboratory for analysis.

SEC. XI. No person shall have in his possession with intent to sell, offer, or expose for sale, or sell or deliver for sale or consumption in any store or place of business, or from any wagon, sleigh, or other vehicle, or in can or package, any milk commonly known as skim milk or buttermilk, without first procuring a certificate of registration for the same in accordance with the provisions of this ordinance, and, secondly, without marking the can or package containing said skim milk or buttermilk from which milk is delivered to the purchaser or consumer with the words "skim milk" or "buttermilk," according to which is offered for sale, in large plain black letters. Said words to be in English, and on the top or side of the can in such a position as to be easily seen when said milk is delivered to the customer.

SEC. XII. The health officer of the city of Battle Creek is hereby appointed ex officio inspector of milk in and for the city of Battle Creek, with the power and authority to appoint such assistants, analyzers, and collectors of samples as may be necessary to enforce this ordinance, subject to the approval of the board of health at such compensation as may be approved by the common council. And it shall be the duty of the milk inspector to file with the secretary of the board of health a complete record in writing of his proceedings as inspector or collector of samples, giving a full and accurate account of all inspections made under the provisions of this ordinance.

SEC. XIII. The board of health of the city of Battle Creek is hereby authorized and empowered to furnish all necessary blanks and books of record and apparatus required to carry out the provisions of this ordinance; and make and promulgate such rules, regulations, and requirements as may be thought necessary to assist the inspector of milk or his assistants in properly executing the duties of the same, and which shall upon the approval of this council have the same force as other provisions of this ordinance.

SEC. XIV. It shall be the duty of the health officer to make complaint in writing before any justice of peace of the city of Battle Creek of any violation of this ordinance coming to his knowledge.

SEC. XV. Each violation of any provisions of this ordinance shall be construed to constitute a separate and complete offense, and for such violation on the same day or on different days the person so offending shall be liable to the penalties herein provided.

SEC. XVI. Any person, firm, or corporation violating any of the provisions of this ordinance shall upon conviction thereof be punished by a fine of not less than \$15 and cost of prosecution for the first offense, and upon conviction of the second offense shall be punished by a fine of \$15 and costs of prosecution, and may in addition have his certificate revoked by the board of health and may not again be permitted to sell milk in the city of Battle Creek.

SEC. XVII. The ordinance entitled "An ordinance to regulate and control the selling of milk within the city of Battle Creek, and to license venders thereof, and to regulate the care of the cows from which milk is sold, and for the inspection and examination of dairies and dairy herds and of milk," approved June 27, 1898, is hereby repealed.

SEC. XVIII. This ordinance shall take effect two weeks after its final passage.--  
[Ordinance approved November 14, 1910.]

#### BROCKTON, MASS.

##### MILK—REGULATIONS FOR THE PRODUCTION, CARE, AND SALE.

RULE 1. No person, firm, or corporation shall engage in the production, sale, delivery, or distribution of milk in the city of Brockton except in accordance with the provisions of the revised laws of Massachusetts and of acts of the legislature additional thereto, or in amendment thereof, and in compliance with the following rules and regulations of the board of health of said city.

RULE 2. Every person, firm, or corporation producing, keeping, or offering for sale milk in the city of Brockton shall annually before the 1st day of June be licensed so to do by the milk inspector of said city.

RULE 3. No milk shall be produced, kept, sold, or offered for sale in the city of Brockton from any cow or cows that are not properly cared for, or that have not within one year been examined by competent authority and certified to be free from all diseases dangerous to the public health, or that are kept in a stable that is not in a clean, healthful, and sanitary condition and that is not open to inspection by the board of health or the milk inspector at all times.

RULE 4. No milk shall be produced, kept, sold, or offered for sale in the city of Brockton unless it has been strained, mixed, and cooled immediately after it is drawn from the cow. Said milk shall not be strained, mixed, or cooled in any room which is not provided with tight walls and floor of such construction as will allow easy and thorough cleaning, or which is not kept constantly clean, or which is occupied by horses, cows, or other animals, or in any room which is used in whole or in part for domestic or sleeping purposes, unless the storage room for milk is separated from the other parts of the building and provision made for the exclusion of outside dust and flies, to the satisfaction of the board of health.

RULE 5. Milk kept for sale in any shop, restaurant, market, bakery, or other establishment shall be stored in a covered cooler box or refrigerator. No vessel containing milk for sale shall be allowed to stand outside of said cooler box or refrigerator, except while a sale of said milk is being made. Every such cooler box or refrigerator shall be properly drained, cleansed, and cared for, and shall be kept tightly closed, except during such intervals as are necessary for the introduction of milk or ice, and shall be kept only in such locations as shall be approved by the board of health.

RULE 6. The milk inspector shall, under the direction of this board, investigate and take samples to determine the quality of the milk sold, offered or exposed for sale, or intended for sale in this city, and he shall make, or cause to be made, examinations and inspections thereof to ascertain whether or not adulterated or impure milk is sold, kept, offered or exposed for sale, or intended for sale in said city, contrary to the

statutes of this Commonwealth or to the provisions of these rules and regulations. He shall visit dairies supplying milk in and to the inhabitants of the city of Brockton and all places where milk is stored, kept, or offered for sale, as often as deemed necessary by this board; and he shall report the conditions thereof at the time of such inspection in writing to this board. He shall act as agent and prosecuting officer for the board of health in all matters pertaining to milk.

**RULE 7.** All cans, bottles, or other vessels of any sort used in the production, storage, sale, or distribution of milk in this city shall be cleaned and sterilized with boiling water or steam before they are again used for the same purpose, and all cans, measures, or other utensils made of metal shall be kept free from dents and rust, and there shall be proper appliances for washing all utensils used in the production, mixing, storage, sale, or distribution of milk, and all such utensils shall be washed, cleaned, and sterilized with boiling water or steam regularly after being so used. The filling of bottles except at the dairy or creamery is prohibited.

**RULE 8.** The water used in washing apparatus and utensils must be from a public water supply, or, if from any other source, its use must be subject to the approval of the board of health.

**RULE 9.** No milk shall be brought into or carried within the city of Brockton for the purpose of sale which has been carried upon any wagon or vehicle which is not clean and free from offensive odors or upon which swill, refuse, garbage, or decaying, unwholesome, or filthy matter is carried.

**RULE 10.** No person, by himself, or by his servant or agent, or as the servant or agent of any other person, firm, or corporation, shall, in the city of Brockton, sell, exchange, or deliver, or have in his custody or possession with intent to sell, exchange, or deliver, any milk, skimmed milk or cream which contains more than 500,000 bacteria per cubic centimeter, or any pathogenic microorganism.

**RULE 11.** Every person engaged in the production, storage, transportation, sale, delivery, or distribution of milk for sale in this city shall notify the board of health immediately on the occurrence of any case or cases of infectious disease, either in himself or his family, or among his employees, or their immediate associates, or within the building or premises where milk is stored, sold, or distributed, and at the same time shall suspend the sale or distribution of milk until authorized to resume the same by the board of health. No vessel which has been handled by a person suffering from a disease, or which is on the premises of a person in whose family or household infectious disease exists, shall be removed to hold or convey milk until it has been thoroughly disinfected and sterilized under the supervision of an agent of the board of health.

**RULE 12.** Bottles or other milk containers shall not be left with any family in which there is any contagious disease, but milk may be delivered to such families by pouring into vessels furnished by said families. No bottle or other container, previously left with any family in which a contagious disease occurs shall be removed therefrom, except with the consent of the board of health in writing.

**RULE 13.** For the purpose of enabling the board of health to carry out and enforce the provisions of these rules and regulations the milk inspector, acting as the authorized agent of, or any other qualified inspector or agent of the board of health, or any member of said board, shall, at all times, have free access to all barns, stables, dairies, creameries, stores, wagons, and all other buildings or premises in which cattle are kept, from which any part of the milk supply of the city of Brockton is obtained, or in which milk is received, kept, bottled, canned, or offered for sale, for the purpose of making inspection of said premises, cattle, vehicles, cans, vessels, measures, and other utensils used in conducting the handling, sale, and delivery of milk, and for the purpose of taking, for analysis or other tests to determine its quality, samples of milk kept or intended for sale in the city of Brockton.

**RULE 14.** Every person, firm, or corporation licensed to sell milk in the city of Brockton shall promptly notify the board of health of said city upon commencing or discontinuing the sale of milk from any dairy or producer.

**RULE 15.** Whoever tests milk or cream which is to be offered for sale in any form, by tasting, shall do so by means of a spoon, or piece of wood, paper, cardboard, or other article, and such spoon, piece of wood, paper, cardboard, or other article shall not again be brought in contact with the milk intended for sale, or be used for testing milk until after being thoroughly washed and sterilized. No person shall permit his hands, fingers, lips, or tongue to come in contact with milk intended for sale, in any form. All persons engaged in the tasting, mixing, or handling of milk for sale in any form shall, before engaging in such tasting, mixing, or handling, thoroughly clean their hands and finger nails, and keep them clean and dry during such tasting, mixing, or handling. No person shall permit his hands, while wet, to remain or pass over any open vessel containing milk intended for sale in any form. No person shall fill

a jar, can, or other receptacle with milk while the aforesaid jar, can, or other receptacle is held over an open vessel containing milk intended for sale in any form. No person who has sore throat, diarrhea, or is suffering from any other disturbance of the bowels, or has symptoms of infectious or contagious disease shall engage in the handling of milk which is to be offered for sale or which is for sale.

RULE 16. No urinal, water-closet, or privy shall be located in rooms in which milk is handled, or so situated as to pollute the atmosphere of said room.

RULE 17. Dealers in milk are prohibited from allowing any person or persons not in their employ to loiter about the milk room or handle any vessel or utensil used in the sale and distribution of milk.

RULE 18. Every person, firm, or corporation in the city of Brockton, engaged in the sale, delivery, or distribution of milk from dairies shall, upon request from the board, certify that the above rules are complied with by said dairies. [Regulations board of health, adopted April 26, 1910.]

#### BROOKLINE, MASS.

#### CONTAGIOUS DISEASES—RESTRICTIONS PLACED UPON THE SICK AND CONTACTS—PLACARDING, DISINFECTION—PUBLIC FUNERALS PROHIBITED.

1. *Ordered:* (a) That no child be allowed to attend school from any household in which there is or has been a case of scarlet fever, for a period of six weeks from the commencement of the last case in the household (except as provided in section (d) of this order), and until a certificate has been presented from the attending physician, the board of health or its agent, that all danger of conveying the disease by such child is passed.

(b) That no child who has visited a house in which there was at the time a case of scarlet fever shall attend school until the expiration of two weeks following exposure, unless he has already had that disease.

(c) That no child who has diphtheria be allowed to attend school for a period of one week from the date of the second successive negative bacteriological culture from both nose and throat (except as provided under section (d) of this order) and until a certificate has been presented from the attending physician that all danger of conveying the disease by such child is passed; and that no well child be allowed to attend school from any household in which there is or has been a case of diphtheria until the same precautions have been taken, with the exception that but one negative bacteriological culture, from both nose and throat, is required.

(d) That the agent of the board of health may, if circumstances warrant (for example, removal of the patient to hospital), give to children not infected in a household in which there is or has been scarlet fever or diphtheria, a special permit to return to school as soon as he considers it safe for them to do so.

(e) That no child from any house where there is a case of scarlet fever or diphtheria shall be allowed to mingle with persons from any other house until after the removal, recovery, or death of the patient and the disinfection of the premises.

(f) That every house infected with diphtheria, scarlet fever, or smallpox shall have affixed on or near the front and rear doors a card, furnished by the board of health, stating the disease to be avoided; and any unauthorized person removing such a card shall be liable to a fine not exceeding \$100.

2. *Ordered,* That no child who has chicken pox or German measles be allowed to attend school until a period of two weeks has elapsed from the first appearance of the eruption and until a certificate to that effect from the parent has been presented.

3. *Ordered,* That no child found to be ill with consumption, and a menace to the health of others, be allowed to continue in school.

4. *Ordered,* That no child who has mumps be allowed to attend school until a period of three weeks has elapsed from the first signs or symptoms of the disease and until a certificate to that effect from the parent has been presented.

5. *Ordered,* That no child who has measles be allowed to attend school until a period of two weeks has elapsed from the first appearance of the eruption and until a certificate to that effect from the parent has been presented; and that no child in a household in which there is a case of measles shall be allowed to attend school within two weeks from the appearance of the rash in the last case in such household, without a certificate from the parent stating that such child has already had the disease.

6. *Ordered,* That no child with whooping cough be allowed to attend school until a period of eight weeks has elapsed from the beginning of the cough and until a certificate to that effect from the parent has been presented; and that no child in a household in which there is a case of whooping cough shall be allowed to attend school within



eight weeks from the beginning of the cough in the last case in such household without a certificate from the parent stating that such child has already had the disease.

7. *Ordered*, That no child be allowed to attend school from any household in which there is or has been a case of cerebrospinal meningitis until a certificate has been presented from the board of health or its agent.

8. *Ordered*, That such rooms and such articles in any house as in the opinion of the board of health have been subjected to infection or contagion from smallpox, scarlet fever, diphtheria, cerebrospinal meningitis, or consumption shall be disinfected by the board. The attending physician or the agent of the board of health shall decide in each case as to the proper time for disinfecting, and shall then notify the board; but in no case of scarlet fever shall disinfection be done in less than four weeks from the commencement of the last case in the household (except by special permit of the agent of the board); and in diphtheria disinfection shall not be done until after at least two successive negative bacteriological cultures from both nose and throat have been obtained; and in all cases a certificate of the attending physician shall be required, stating that all danger of infection from the patient has passed; said certificate in case of diphtheria to be based on the result of bacteriological examinations as above prescribed. Disinfection by the board shall also be done in every case after a death from consumption, and after the removal of a consumptive patient, whenever in the opinion of the attending physician or of the agent of the board disinfection is necessary.

9. *Ordered*, That no public funeral shall be held over the remains of any person who has died of smallpox, scarlet fever, or diphtheria, or cerebrospinal meningitis without the written permit of the board of health, and under such regulations as may prevent the spread of either of said diseases. *Ordered*, further, that the remains of any person who has died from either of said diseases shall at once be placed in a tight or sealed coffin, and shall not thereafter be exposed to view or disturbed except for burial.

10. *Ordered*, That the undertakers of the town be notified to warn families in the case of the death of a member from contagious disease against a public funeral.

11. *Ordered*, That no person infected with diphtheria, membranous croup, or scarlet fever shall leave the board of health hospital until the board of health or its agent shall find and certify that all danger of communicating such disease has passed.

12. *Ordered*, That no person other than patients, physicians, and nurses shall enter the board of health hospital except with the special permission of the board or of its agent.

13. *Ordered*, That visiting the grounds of the board of health hospital shall be allowed daily between the hours of 2 and 3 p. m. only, except with the special permission of the agent of the board; but in no case shall children be allowed to visit the premises.

14. *Ordered*, That no article of food be sent to the patients in the board of health hospital excepting fruit, which must be left with the nurse in charge.

15. *Ordered*, That in the case of death where the deceased had not been attended by a practicing physician, the certificate of death shall be issued by the medical examiner.

16. *Ordered*, That no dead body of any person shall be carried to any cemetery, or from one place to another within the town, in any public vehicle other than a hearse or undertaker's wagon provided for that purpose.

17. *Ordered*, That the use of "wall draperies" in any room or place used for a funeral or for the preparation or retention of any human body before or in connection with such funeral be and the same is hereby forbidden. [Regulation board of health, adopted March 7, 1910.]

#### SPITTING—FORBIDDEN IN PUBLIC PLACES.

18. *Ordered*, That no person shall spit upon the floor of any public conveyance, shop, store, hall, church, schoolhouse, railroad station, or other public building in said town, or upon the steps of any of said conveyances or buildings, or upon the sidewalk (spitting into the gutter or street is not forbidden) of any public way of said town. [Regulation board of health, adopted March 7, 1910.]

#### DOMESTIC ANIMALS—KEEPING OF WITHIN CITY.

19. *Ordered*, That no person or corporation shall keep or allow to be kept upon any premises in his or its possession, within the limits of this town, any swine or more than one cow, without securing a permit from the board of health to do so. Such permit shall expire on the 1st day of May, annually.

20. *Ordered*, That no person or corporation shall use any building as a stable for cows, unless such building is properly lighted and ventilated; has a tight floor and



roof; good drainage, connecting wherever practicable with the public sewer; a supply of pure water, and not less than 1,000 cubic feet of air space for each animal.

21. *Ordered*, That manure shall not be allowed to accumulate in the neighborhood of barns, and that no manure heap shall be allowed within 100 feet of any dwelling unless so covered as not to prove offensive. Yards surrounding buildings where cows are kept must be well drained and free from standing water and filth. The barns shall be kept as clean as possible and the floor shall be sprinkled before being swept.

22. *Ordered*, That neither hogs nor manure shall be kept in cellars of cow stables, except by special permit of the board of health. [Regulation board of health, adopted March 7, 1910.]

#### MILK—PRODUCTION AND SALE OF.

23. *Ordered*, That animals kept for the production of milk shall not be fed upon swill.

24. *Ordered*, That a person having any infectious disease (the board considers consumption to come within the meaning of the statutes in regard to infectious diseases), or having recently been in contact with any such person, shall not be allowed to milk cows or handle cans, measures, or other vessels used for milk intended for sale, or in any way take part or assist in the sale of the same, until the board of health is satisfied that all danger of communicating such disease is passed.

25. *Ordered*, That the milk cans or jars of milk dealers shall not be left at any house in which there is a case of diphtheria, scarlet fever, or smallpox, but the milk shall be poured into receptacles furnished by the customer.

26. *Ordered*, That premises where cattle are kept shall be open at all times to inspection by the board of health, or its appointed officer.

27. *Ordered*, That upon satisfactory evidence being furnished to the board of health of violation of any of the above regulations, the permit will be revoked.

\* \* \* \* \*

35. *Ordered*, That no person, by himself or by his servant or agent, or as the servant or agent of any other person, firm, or corporation, shall in the town of Brookline sell, exchange, or deliver, or have in his custody or possession with intent to sell, exchange, or deliver, any milk, skimmed milk, or cream which contains more than 300,000 bacteria per cubic centimeter, or which has a temperature higher than 50° F.

36. *Ordered*, That all milk sold in the town of Brookline other than from wagons shall be delivered to the purchaser in original sealed jars, or from a milk cooler which has been approved by the board of health.

37. *Ordered*, That premises, compartments, or rooms used for the storage and sale of milk in the town of Brookline shall be kept cleansed in a manner satisfactory to the board of health.

38. *Ordered*, That no person by himself or by his servant or agent, or as servant or agent of any other person, firm, or corporation, shall in the town of Brookline sell, exchange, or deliver, milk, skimmed milk, or cream produced upon premises where there is a case of contagious disease without the written consent of the board of health. [Regulation board of health, adopted March 7, 1910.]

#### GLANDERS IN HORSES—TO BE REPORTED TO BOARD OF HEALTH.

28. *Ordered*, That any person having reason to suspect the presence of glanders and farcy among horses shall immediately report that suspicion, together with the street and number of the premises at which the animal is kept, to the board of health, when the veterinary inspector will at once examine the animal. (The more ordinary symptoms of glanders and farcy are: A discharge from the nostrils, enlargement and hardness of the glands under the lower jaw; or nodular enlargement of the skin with or without ulceration.) [Regulation board of health, adopted March 7, 1910.]

#### CESSPOOLS AND VAULTS—MANNER OF EMPTYING.

29. *Ordered*, That no vault or cesspool shall be emptied by any other than the odorless process, nor by carts not of the Odorless Excavating Co., except permission be first obtained from the chief of police. It is further ordered that neither night soil nor the contents of cesspools shall be dumped within the limits of the town. [Regulation board of health, adopted March 7, 1910.]

#### MANURE, GARBAGE, AND REFUSE—REMOVAL OF.

30. *Ordered*, That the manure from livery stables shall not be removed between the hours of sunrise and sunset.

31. *Ordered*, That all householders be required to keep the waste material set out by them for removal by the town in separate receptacles.

(1) One or more of such receptacles shall be used exclusively for garbage or swill and shall have tight-fitting covers. (An old pork barrel, beer keg, or lead cask makes an excellent swill barrel and may advantageously be kept in a tight garbage locker.)

(2) A second receptacle or receptacles, preferably made of iron, shall be used exclusively for ashes, tin cans, bottles, and other incombustible waste.

(3) A third separate set of receptacles shall be used exclusively for dry combustible waste, such as paper, old shoes, house sweepings, and such other waste material as it is customary for the health department to remove.

32. *Ordered*, That no person shall overhaul the contents of receptacles for waste material set upon the sidewalks to be removed by the town.

33. *Ordered*, That no person shall throw upon the sidewalk, or into any public street or catch basin, any paper, tin can, house sweepings, lawn rakings, old shoes, orange peel, banana skin, dead animal, or other waste material. [Regulation board of health, adopted March 7, 1910.]

#### BARBER SHOPS—REGULATION OF.

34. *Ordered*, That all barber shops, together with all furniture, shall be kept in a cleanly and sanitary condition. Mugs, shaving brushes, razors, scissors, clipping machines, pincers, needles, and other steel instruments shall be sterilized either by immersion in boiling water or in alcohol of at least 60 per cent strength, after each separate use. Combs shall be thoroughly cleaned with soapsuds and a brush after each separate use. A separate clean towel shall be used for each person. Alum or other material used to stop the flow of blood shall be applied only on a towel or other clean cloth. The use of powder puffs and of sponges is prohibited, except that a sponge owned by a customer may be used on him. Every barber shop shall be kept well ventilated and provided with running hot and cold water. No person shall be allowed to use any barber shop as a sleeping room. Every barber shall thoroughly cleanse his hands immediately before serving each customer. Every barber shop shall be inspected at least twice annually by the sanitary agent of the board. A copy of this order shall be kept posted in plain view in every barber shop. [Regulation board of health, adopted March 7, 1910.]

#### CARCASSES OF DEAD ANIMALS—TO BE REPORTED TO THE BOARD OF HEALTH.

39. *Ordered*, That bodies of deceased animals which can not be conveniently incinerated or buried shall be reported to the board of health within 24 hours after death, or upon discovery of such dead bodies. [Regulation board of health, adopted March 7, 1910.]

## PLAGUE-PREVENTION WORK.

### PLAGUE-INFECTED RATS FOUND AT SEATTLE, WASH.

The finding of two plague-infected rats has been reported at Seattle, Wash. One rat was found on September 20 and 1 on September 21.

### PLAGUE-INFECTED GROUND SQUIRREL FOUND IN CALIFORNIA.

During the week ended September 30 a diagnosis of plague was made in 1 squirrel found in Contra Costa County. The squirrel had been obtained at Peoples Water Co. land,  $3\frac{1}{2}$  miles east of Stege, Rancho El Sobrante, Brissac tract, September 6, 1911.

### DISTRIBUTION OF POISON.

In connection with the making and maintenance of a squirrel-free zone around the cities of California on San Francisco Bay, 6,320 acres of land in Alameda County and 1,185 acres in Contra Costa County were covered with poison during the week ended September 30, 1911.

During the same period 3,520 acres of land in San Joaquin County and 2,090 acres in Stanislaus County were covered with poison for the purpose of eradicating plague foci.

### Record of Plague Infection.

Places.	Date of last case of human plague.	Date of last case of rat plague.	Date of last case of squirrel plague.	Total number of rodents found infected since May, 1907.
<b>California:</b>				
<b>Cities—</b>				
San Francisco.....	Jan. 30, 1908.....	Oct. 23, 1908.....	None.....	398 rats.
Oakland.....	Aug. 9, 1911.....	Dec. 1, 1908.....	do.....	126 rats.
Berkeley.....	Aug. 27, 1907.....	None.....	do.....	None.
Los Angeles.....	Aug. 11, 1908.....	do.....	Aug. 21, 1908.....	1 squirrel.
<b>Counties—</b>				
Alameda (exclusive of Oakland and Berkeley).	Sept. 26, 1909.....	Oct. 17, 1909.....	Aug. 9, 1911.....	108 squirrels, 1 wood rat.
Contra Costa.....	July 21, 1911.....	None.....	Sept. 15, 1911.....	363 squirrels.
Merced.....	None.....	do.....	July 13, 1911.....	5 squirrels.
Monterey.....	do.....	do.....	Aug. 6, 1911.....	Do.
San Benito.....	June 5, 1910.....	do.....	June 8, 1911.....	22 squirrels.
San Joaquin.....	Sept. 18, 1911.....	do.....	Aug. 26, 1911.....	18 squirrels.
San Luis Obispo.....	None.....	do.....	Jan. 29, 1910.....	1 squirrel.
Santa Clara.....	Aug. 23, 1910.....	do.....	Oct. 5, 1910.....	23 squirrels.
Santa Cruz.....	None.....	do.....	May 17, 1910.....	3 squirrels.
Stanislaus.....	do.....	do.....	June 2, 1911.....	13 squirrels.
<b>Washington:</b>				
<b>City—</b>				
Seattle.....	Oct. 30, 1907.....	Aug. 26, 1911.....	None.....	23 rats.

## Rats Collected and Examined for Plague Infection.

Places.	Week ended—	Found dead.	Total collected.	Examined.	Found infected.
California:					
Cities—					
Berkeley.....	Sept. 30, 1911		<sup>1</sup> 133	90	None.
Oakland.....	do.....	38	<sup>2</sup> 606	459	None.
San Francisco.....	do.....	26	<sup>3</sup> 1,598	1,193	None.
Counties—					
San Joaquin.....	do.....		<sup>4</sup> 14	12	None.
Washington:					
City—					
Seattle.....	do.....		776	662	None.

<sup>1</sup> Identified, *Mus norvegicus* 99, *Mus musculus* 34.<sup>2</sup> Identified, *Mus norvegicus* 522, *Mus musculus* 81, *Mus rattus* 1, *Mus alexandrinus* 2.<sup>3</sup> Identified, *Mus norvegicus* 908, *Mus musculus* 316, *Mus rattus* 260, *Mus alexandrinus* 114.<sup>4</sup> Identified, *Mus alexandrinus* 14.

## Squirrels Collected and Examined for Plague Infection.

Places.	Week ended—	Shot or trapped.	Found dead.	Examined.	Found infected.
California:					
Counties—					
Alameda.....	Sept. 30	146	16	162	None.
Butte.....	do.....	174		169	None.
Colusa.....	do.....	102		102	None.
Contra Costa.....	do.....	69	81	150	1
Glenn.....	do.....	313		263	None.
Kern.....	do.....	48		48	None.
Lake.....	do.....	93		93	None.
Merced.....	do.....	130		130	None.
San Benito.....	do.....	68		68	None.
San Joaquin.....	do.....	190	53	243	None.
Shasta.....	do.....	33		33	None.
Sonoma.....	do.....	65		65	None.
Stanislaus.....	do.....	180	2	182	None.
Oregon:					
County—					
Jackson.....	do.....	7		7	None.
Total.....		1,618	152	1,715	1

## Other Animals Collected and Examined.

Places.	Week ended—	Animals collected.	Examined.	Found infected.
California:				
Counties—				
Butte.....	Sept. 30	1 rabbit.....	1	None.
Colusa.....	do.....	do.....	1	None.
Glenn.....	do.....	5 rabbits, 2 wood rats.....	7	None.
Kern.....	do.....	3 gophers.....	2	None.
Merced.....	do.....	3 rabbits, 1 chipmunk.....	3	None.
San Joaquin.....	do.....	17 rabbits, 4 kangaroo rats.....	17	None.
Shasta.....	do.....	2 rabbits.....	2	None.
Stanislaus.....	do.....	24 rabbits.....	24	None.
Total.....			57	

## SMALLPOX IN THE UNITED STATES.

In the following tables the States indicated by an asterisk are those from which reports of smallpox are received only from certain city, and in some cases county, boards of health. In these States, therefore, the recorded cases and deaths should not be taken as showing the general prevalence of the disease. In the States not marked by an asterisk the reports are received monthly from the State boards of health and include all cases reported throughout the State.

## SMALLPOX IN THE UNITED STATES—Continued.

Reports Received During Week Ended Oct. 20, 1911.

Places.	Date.	Cases.	Deaths.	Remarks.
California.....	June 1-30.....		2	Not previously reported.
Colorado:				
Counties—				
Denver.....	Sept. 1-30.....	6		
Lake.....	..do.....	1		
Kiowa.....	..do.....	3		
Pueblo.....	..do.....	1		
Summit.....	..do.....	4		
Weld.....	..do.....	1		
Total for State.....		16		
Connecticut.....	Sept. 1-30.....			No cases.
Iowa:				
Counties—				
Fremont.....	..do.....	1		
Madison.....	..do.....	1		
Polk.....	..do.....	1		
Pottawattamie.....	..do.....	23		
Scott.....	..do.....	1		
Total for State.....		27		
Louisiana:				
New Orleans.....	Oct. 1-7.....	1		
Michigan:				
Counties—				
Grand Traverse.....	Sept. 1-30.....	1		
Grafton.....	..do.....	1		
Saginaw.....	..do.....	1		
St. Clair.....	..do.....	4		
Tuscola.....	..do.....	1		
Wayne.....	..do.....	1		
Total for State.....		9		
Minnesota:				
Counties—				
Dodge.....	Sept. 9-25.....	1		
Hennepin.....	Sept. 11-Oct. 2.....	13		
Otertail.....	Sept. 2-18.....	2		
Ramsey.....	Sept. 26-Oct. 2.....	33		
Redwood.....	Aug. 15-21.....	1		
Rock.....	Aug. 29-Sept. 4.....	1		
St. Louis.....	Aug. 1-Sept. 18.....	6		
Wadena.....	Aug. 1-7.....	2		
Total for State.....		59		
North Dakota:				
Counties—				
Cass.....	Sept. 1-30.....	4		
Cavalier.....	..do.....	4		
Grand Forks.....	..do.....	2		
Lamoure.....	..do.....	6		
Total for State.....		16		
Washington:				
Counties—				
Adams.....	June 1-30.....	1		Report for the month received out of date.
Challam.....	..do.....	2		
King.....	..do.....	36		
Kitsap.....	..do.....	2		
Lewis.....	..do.....	2		
Mason.....	..do.....	5		
Okanogan.....	..do.....	2		
Skamania.....	..do.....	1		
Total for State.....		51		
Wisconsin.....	July 1-31.....			No cases.
Counties—				
Douglas.....	Sept. 1-30.....	12		
Pierce.....	..do.....	6		
Wood.....	..do.....	1		
Total for State.....		19		



## SMALLPOX IN THE UNITED STATES—Continued.

## Reports Received from July 1 to Oct. 13, 1911.

[For reports received from Dec. 31, 1910, to June 30, 1911, see Public Health Reports for June 30, 1911. In accordance with custom, the tables of epidemic diseases are terminated semiannually and new tables begun.]

Places.	Date.	Cases.	Deaths.	Remarks.
<b>* Alabama:</b>				
Mobile.....	June 18-24.....	3		
Montgomery.....	June 25-Aug. 30....	6		
Total for State.....		9		
<b>Arizona:</b>				
County—				
Cochise.....	July 1-31.....	7		Aug. 1-31, no cases.
<b>California:</b>				
Counties—				
Alameda.....	Aug. 1-31.....	1		
Fresno.....	do.....	4		
Los Angeles.....	May 1-Aug. 31....	9		
Sacramento.....	Aug. 1-31.....	1		
San Bernardino.....	do.....	2		
Santa Cruz.....	May 1-31.....	1		
San Diego.....	do.....	1		
San Francisco.....	May 1-Aug. 31....	4		
San Joaquin.....	Aug. 1-31.....	2		
Siskiyou.....	do.....	1		
Tulare.....	do.....	1		
Ventura.....	do.....	1		
Total for State.....		28		
<b>Colorado:</b>				
Counties—				
Archuleta.....	Aug. 1-31.....	1		
Boulder.....	June 1-July 31....	3		
Chaffee.....	June 1-30.....	3		
Clear Creek.....	June 1-July 31....	8		
Conejos.....	do.....	4		
Costilla.....	June 1-30.....	1		
Delta.....	do.....	7		
Denver.....	June 1-Aug. 31....	31		
Fremont.....	Aug. 1-31.....	31		
El Paso.....	June 1-30.....	2		
Huerfano.....	June 1-Aug. 31....	7		
Jefferson.....	Aug. 1-31.....	1		
Kiowa.....	July 1-Aug. 31....	4		
Lake.....	June 1-Aug. 31....	9		
La Plata.....	June 1-July 31....	7		
Larimer.....	June 1-Aug. 31....	10		
Las Animas.....	Aug. 1-31.....	1		
Lincoln.....	June 1-30.....	2		
Mesa.....	do.....	1		
Morgan.....	Aug. 1-31.....	3		
Montrose.....	July 1-31.....	2		
Otero.....	do.....	1		
Phillips.....	do.....	1		
Pueblo.....	June 1-Aug. 31....	7		
San Miguel.....	June 1-30.....	1		
Washington.....	June 1-July 31....	11		
Weld.....	July 1-31.....	1		
Total for State.....		131		
<b>Connecticut, entire State.....</b>				May 1-31, no cases.
Middlesex County.....	July 1-Aug. 31....	2		
<b>District of Columbia.....</b>	July 2-8.....	5		
<b>Florida:</b>				
Counties—				
Alachua.....	Aug. 20-26.....	3		
Bradford.....	July 17-Sept. 30... July 9-22.....	8		
Citrus.....	July 2-8.....	2		
Columbia.....	July 2-8.....	1		
De Soto.....	June 16-Aug. 26... June 16-Sept. 23... June 16-Aug. 26... July 9-Sept. 23... June 16-Aug. 26... July 2-Sept. 30....	7		
Duval.....	June 16-Sept. 23... June 16-Aug. 26... July 9-Sept. 23... June 16-Aug. 26... July 2-Sept. 30....	44	1	
Escambia.....	June 16-Aug. 26... July 9-Sept. 23... June 16-Aug. 26... July 2-Sept. 30....	7		
Gadsden.....	June 16-Aug. 26... July 2-Sept. 30....	72		
Hillsboro.....	June 16-Aug. 26... July 2-Sept. 30....	3		
Jackson.....	July 2-Sept. 30....	57		

## SMALLPOX IN THE UNITED STATES—Continued.

\* Reports Received from July 1 to Oct. 13, 1911.

Places.	Date.	Cases.	Deaths.	Remarks.
<b>Florida—Continued.</b>				
<b>Counties—Continued.</b>				
Jefferson.....	Sept. 16-23.....	20		
Leon.....	June 16-July 8....	11		
Levy.....	July 9-16.....	1		
Madison.....	Sept. 10-16.....	2		
Manatee.....	June 16-July 8....	8		
Marion.....	July 9-Sept. 16....	2		
Orange.....	June 16-July 16....	2		
Pasco.....	July 9-16.....	20		
Polk.....	June 16-July 16....	5		
Santa Rosa.....	July 9-16.....	6		
Sumter.....	Aug. 1-6.....	1		
Volusia.....	July 9-16.....	1		
Washington.....	Aug. 1-26.....	8		
Total for State.....		291	1	
<b>Indiana:</b>				
<b>Counties—</b>				
Adams.....	Aug. 1-31.....	1		
Allen.....	June 1-30.....	1		
Bartholomew.....	July 1-31.....	1		
Benton.....	June 1-30.....	2		
Blackford.....	do.....	4		
Boone.....	Aug. 1-31.....	1		
Cass.....	do.....	1		
Clarke.....	July 1-31.....	2		
Clinton.....	June 1-30.....	7		
Delaware.....	June 1-Aug. 31....	14		
Franklin.....	July 1-31.....	1		
Henry.....	June 1-Aug. 31....	2		
Howard.....	do.....	41		
Jay.....	June 1-30.....	2		
Lake.....	Aug. 1-31.....	3		
Laporte.....	June 1-30.....	2		
Madison.....	June 1-Aug. 31....	21		
Marion.....	do.....	4		
Orange.....	Aug. 1-31.....	2		
Parke.....	June 1-July 31....	4		
Posey.....	June 1-30.....	3		
Rush.....	Aug. 1-31.....	3		
Shelby.....	June 1-30.....	3		
Tippecanoe.....	July 1-31.....	2		
Tipton.....	June 1-Aug. 31....	6		
Vanderburg.....	do.....	1	1	
Vigo.....	July 1-31.....	8		
Wabash.....	June 1-30.....	2		
Wayne.....	June 1-July 31....	13		
Total for State.....		157	1	
<b>Iowa:</b>				
<b>Counties—</b>				
Adams.....	June 1-July 31....	19		
Appanoose.....	June 1-30.....	1		
Blackhawk.....	do.....	4		
Carroll.....	do.....	1		
Davis.....	do.....	3		
Decatur.....	June 1-July 31....	2		
Fremont.....	June 1-30.....	11		
Henry.....	do.....	1		
Johnson.....	July 1-31.....	13		
Lee.....	June 1-30.....	1		
Linn.....	July 1-Aug. 31....	9		
Marshall.....	June 1-Aug. 31....	9		
Mills.....	June 1-30.....	1	1	
Polk.....	June 1-Aug. 31....	13		
Pottawattamie.....	do.....	19		
Scott.....	June 1-July 31....	6		
Sioux.....	do.....	8		
Taylor.....	do.....	9		
Wapello.....	June 1-Aug. 31....	5		
Wright.....	June 1-30.....	1		
Woodbury.....	July 1-31.....	1		
Total for State.....		137	1	

## SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from July 1 to Oct. 13, 1911.

Places.	Date.	Cases.	Deaths.	Remarks.
<b>Kansas:</b>				
Counties—				
Allen.....	May 1-31.....	7		
Anderson.....	June 1-30.....	15		
Atchison.....	May 1-June 30....	2		
Barton.....	do.....	8		
Clark.....	July 1-31.....	1		
Clay.....	May 1-31.....	1		
Cloud.....	do.....	1		
Crawford.....	May 1-July 31....	19		
Dickinson.....	May 1-31.....	13		
Doniphan.....	do.....	15		
Douglas.....	May 1-July 31....	4		
Elk.....	May 1-31.....	15		
Ellsworth.....	June 1-30.....	1		
Franklin.....	May 1-31.....	4		
Graham.....	May 1-June 30....	3		
Harvey.....	May 1-July 31....	30		
Haskell.....	May 1-31.....	19		
Jefferson.....	May 1-July 31....	9		
Jewell.....	July 1-31.....	5		
Johnson.....	May 1-June 30....	5		
Kearny.....	June 1-July 31....	2		
Labette.....	May 1-July 31....	13		
Lane.....	June 1-30.....	11		
Leavenworth.....	May 1-June 30....	3		
Lyon.....	July 1-30.....	2		
Marion.....	May 1-31.....	3		
Marshall.....	do.....	3		
Miami.....	do.....	3		
Mitchell.....	do.....	6		
Montgomery.....	do.....	5		
Norton.....	June 30.....	9		
Osage.....	May 1-31.....	1	3	
Pottawatomie.....	do.....	2		
Reno.....	do.....	3		
Republic.....	do.....	1		
Rice.....	June 30.....	13		
Riley.....	May 1-June 30....	9		
Rooks.....	May 1-July 31....	13		
Saline.....	May 1-June 30....	7		
Sedgwick.....	May 1-July 31....	12		
Shawnee.....	do.....	49	11	
Sherman.....	June 1-30.....	1		
Smith.....	May 1-31.....	18		
Thomas.....	do.....	2		
Washington.....	do.....	1		
Wyandotte.....	May 1-June 30....	25		
Total for State.....		394	14	
<b>*Kentucky:</b>				
Covington.....	July 2-22.....	10		
Louisville.....	May 1-31.....	4		
Total for State.....		14		
<b>*Louisiana:</b>				
Parishes—				
Ascension.....	Mar. 1-31.....	21		
Morehouse.....	Apr. 1-30.....	4		
Orleans—				
New Orleans.....	June 25-Aug. 13..	4		
St. Tammany.....	Mar. 1-31.....	3		
Tangipahoa.....	Mar. 1-Apr. 30....	21		
Total for State.....		53		
<b>Maine, entire State.....</b>				
Counties—				
Androscoggin.....	Aug. 1-31.....	3		
Somerset.....	June 1-30.....	3		
Total for State.....		6		
<b>Maryland:</b>				
Counties—				
Frederick.....	July 1-31.....	3		
Prince Georges.....	do.....	1		
Washington.....	June 1-30.....	1		
Total for State.....		5		
				July 1-31, no cases.

## SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from July 1 to Oct. 13, 1911.

Places.	Date.	Cases.	Deaths.	Remarks.
Massachusetts.....				July 1-31, no cases.
County—				
Middlesex.....	June 1-30.....	1		
Michigan:				
Counties—				
Antrim.....	do.....	2		
Calhoun.....	June 1-July 31.....	12		
Cheboygan.....	July 1-31.....	10		
Grand Traverse.....	June 1-30.....	6		
Gratiot.....	Aug. 1-31.....	2		
Isabella.....	June 1-30.....	1		
Mackinac.....	June 1-Aug. 31.....	8		
Marquette.....	June 1-30.....	1		
Milford.....	July 1-31.....	1		
Montcalm.....	July 1-Aug. 31.....	8		
Muskegon.....	July 1-31.....	2		
Oakland.....	June 1-30.....	1		
Ottawa.....	do.....	1		
St. Clair.....	June 1-Aug. 31.....	10		
Shiawassee.....	June 1-30.....	1		
Washtenaw.....	June 1-July 31.....	6		
Wayne.....	June 1-Aug. 31.....	8		
Total for State.....		89		
Minnesota:				
Counties—				
Ramsey.....	Mar. 1-31.....		1	
	May 1-31.....		1	
Brown.....	June 20-23.....	2		
Carver.....	June 1-5.....	1		
Dodge.....	July 4-21.....	4		
Fairbault.....	June 6-17.....	2		
Fillmore.....	June 6-12.....	1		
Goodhue.....	July 25-31.....	1		
Hennepin.....	June 1-July 17.....	32		
Houston.....	July 25-31.....	1		
Lac qui Parle.....	June 1-19.....	4		
Mille Lacs.....	June 1-5.....	1		
Otter Tail.....	June 1-July 31.....	6		
Ramsey.....	June 1-5.....	25		
St. Louis.....	June 21-July 31.....	7		
Wadena.....	July 11-17.....	1		
Yellow Medicine.....	June 1-25.....	35		
Total for State.....		124	2	
*Missouri:				
Kansas City.....	June 1-Aug. 31.....	22	1	
St. Louis.....	June 18-Sept. 2.....	2		
Total for State.....		24		
Montana.....				June 1-30, no cases.
Counties—				
Beaverhead.....	July 1-31.....	1		
Cascade.....	do.....	1		
Jefferson.....	do.....	4		
Park.....	do.....	1		
Powell.....	do.....	2		
Silver Bow.....	do.....	3		
Teton.....	do.....	3		
Yellowstone.....	do.....	1		
Total for State.....		16		
*Nebraska:				
Lincoln.....	Feb. 1-June 30.....	200		July 1-31, no cases.
Omaha.....	June 19-Aug. 19.....	4		
South Omaha.....	Aug. 20-23.....	1		
Total for State.....		205		
New Jersey:				No cases in June and August.
County—				
Middlesex.....	July 1-31.....	1		

## SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from July 1 to Oct. 13, 1911.

Places.	Date.	Cases.	Deaths.	Remarks.
<b>New York</b> .....	June 1-30.....	1		
Counties—				
Cattaraugus.....	July 1-Aug. 31....	8		
Erie.....	June 1-July 31....	18		
Clinton.....	June 1-30.....	1		
Franklin.....	do.....	1		
Jefferson.....	Aug. 1-31.....	1		
Monroe.....	June 1-30.....	4		
Onondaga.....	June 1-Aug. 31....	10		
Otsego.....	June 1-30.....	1		
St. Lawrence.....	do.....	4		
Schoharie.....	July 1-31.....	11		
Steuben.....	July 1-Aug. 31....	4		
Tioga.....	June 1-30.....	1		
Ulster.....	do.....	5		
Wayne.....	July 1-31.....	1		
Wyoming.....	do.....	1		
Total for State.....		72		
<b>North Carolina:</b>				
Counties—				
Alamance.....	June 1-July 31....	2		
Avery.....	do.....	56		
Bertie.....	do.....	2		
Catawba.....	June 1-Aug. 31....	2		
Chatham.....	do.....	2		
Craven.....	do.....	3		
Cumberland.....	do.....	7		
Currituck.....	July 1-31.....	1		
Duplin.....	do.....	3		
Durham.....	July 1-Aug. 31....	5		
Edgecombe.....	June 1-30.....	4		
Granville.....	July 1-Aug. 31....	23		
Guilford.....	Aug. 1-31.....	3		
Harnett.....	do.....	2		
Haywood.....	June 1-30.....	3		
Henderson.....	do.....	4		
Johnston.....	July 1-31.....	1		
McDowell.....	Aug. 1-31.....	1		
Mecklenburg.....	July 1-Aug. 31....	7		
New Hanover.....	June 1-July 31....	7		
Pasquotank.....	June 1-30.....	2		
Robeson.....	July 1-Aug. 31....	4		
Rowan.....	June 1-July 31....	2		
Sampson.....	July 1-31.....	1		
Vance.....	Aug. 1-31.....	12		
Warren.....	July 1-Aug. 31....	11		
Watauga.....	June 1-30.....	2		
Wayne.....	July 1-31.....	1		
Wilmington.....	do.....	3		
Total for State.....		176		
<b>North Dakota:</b>				
Counties—				
Billings.....	June 1-July 31....	8		
Cass.....	Aug. 1-31.....	1		
Lamoure.....	July 1-31.....	1		
McKenzie.....	Aug. 1-31.....	1		
Morton.....	June 1-30.....	1		
Mountrail.....	June 1-30.....	6		
Nelson.....	Aug. 1-31.....	4		
Ward.....	June 1-30.....	1		
Total for State.....		23		
<b>Ohio:</b>				
Counties—				
Ashtabula.....	June 1-July 31....	3		
Brown.....	June 1-30.....	4		
Clark.....	July 1-31.....	19		
Clermont.....	June 1-30.....	3		
Defiance.....	do.....	1		
Franklin.....	July 1-31.....	44		
Geauga.....	June 1-30.....	2		
Hamilton.....	July 1-Aug. 31....	19		
Licking.....	July 1-31.....	1		
Lorain.....	do.....	5		
Lucas.....	July 1-Aug. 31....	6		
Pickaway.....	July 1-31.....	3		



## SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from July 1 to Oct. 13, 1911.

Places.	Date.	Cases.	Deaths.	Remarks.
<b>Ohio—Continued.</b>				
<b>Counties—Continued.</b>				
Ross.....	Aug. 1-31.....	9		
Sandusky.....	June 1-30.....	4		
Total for State.....		123		
<b>Oklahoma:</b>				
<b>Counties—</b>				
Bryan.....	June 1-30.....	1		
Caddo.....	May 1-31.....	1		
Carter.....	June 1-30.....	1		
Cleveland.....	May 1-June 30.....	49		
Comanche.....	June 1-Aug. 31.....	9		
Craig.....	June 1-30.....	6		
Custer.....	May 1-31.....	5		
Dewey.....	do.....	6		
Ellis.....	June 1-30.....	3		
Garvin.....	May 1-31.....	19		
Haskell.....	May 1-July 31.....	9		
Hughes.....	May 1-Aug. 31.....	9		
Jefferson.....	May 1-June 30.....	7		
Johnson.....	May 1-31.....	3		
Kay.....	do.....	6		
Kingfisher.....	do.....	1		
Kiowa.....	do.....	1		
Le Flore.....	May 1-June 30.....	3		
Logan.....	June 1-30.....	1		
McClain.....	May 1-31.....	18		
McIntosh.....	do.....	1		
Nowata.....	May 1-June 30.....	2		
Okfuskee.....	May 1-31.....	1		
Oklahoma.....	May 1-June 30.....	10		
Pittsburg.....	June 1-30.....	1		
Pontotoc.....	May 1-31.....	5		
Pottawatomie.....	June 1-30.....	3		
Pushmataha.....	May 1-31.....	2		
Roger Mills.....	May 1-June 30.....	6		
Rogers.....	July 1-31.....	1		
Seminole.....	May 1-June 30.....	16		
Sequoyah.....	Aug. 1-31.....	3		
Tulsa.....	May 1-Aug. 31.....	11		
Wagoner.....	May 1-31.....	1		
Washington.....	June 1-30.....	1		
Washita.....	May 1-June 30.....	2		
Woodward.....	May 1-31.....	1		
Total for State.....		225		
<b>Oregon:</b>				
<b>Counties—</b>				
Baker.....	June 1-30.....	1		
Benton.....	May 1-31.....	1		
Cass.....	Aug. 1-31.....	1		
Douglas.....	Apr. 1-30.....	1		
Grant.....	Aug. 1-31.....	3		
Josephine.....	do.....	1		
Linn.....	Apr. 1-July 31.....	2		
Morrow.....	May 1-31.....	1		
Multnomah.....	Apr. 1-July 31.....	15		
Union.....	June 1-30.....	1		
Wasco.....	do.....	8		
Washington.....	Apr. 1-June 30.....	7		
Yamhill.....	June 1-30.....	1		
Total for State.....		43		
<b>Pennsylvania.....</b>				
	May 1-June 30.....	79		
<b>Rhode Island:</b>				
Providence.....	June 15-July 14.....	3		
<b>*South Carolina:</b>				
Port Royal.....	July 22.....	1		
<b>South Dakota:</b>				
<b>Counties—</b>				
Aurora.....	June 1-July 31.....	3		
Beadle.....	May 1-31.....	13		
Brookings.....	Apr. 1-30.....	9		
Brown.....	Apr. 1-June 30.....	10		
Brule.....	Apr. 1-May 21.....	6		

## SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from July 1 to Oct. 13, 1911.

Places.	Date.	Cases.	Deaths.	Remarks.
<b>South Dakota—Continued.</b>				
<b>Counties—Continued.</b>				
Charles Mix.....	June 1-30.....	1		
Codington.....	June 1-Aug. 31....	8		
Davison.....	May 1-July 31....	7		
Day.....	June 1-30.....	1		
Dewey.....	June 1-Aug. 31....	5		
Fall River.....	Apr. 1-May 31....	18		
Grant.....	do.....	4		
Hanson.....	May 1-31.....	1		
Hughes.....	June 1-30.....	1		
Hutchinson.....	Apr. 1-Aug. 31....	2		
Jerauld.....	May 1-June 30....	6		
Kingsbury.....	Apr. 1-May 31....	8		
Lawrence.....	Apr. 1-July 31....	7		
Lincoln.....	do.....	1		
Lyman.....	Apr. 1-May 31....	16	1	
McCook.....	do.....	11		
Miner.....	Apr. 1-June 30....	5		
Minnehaha.....	do.....	15		
Pennington.....	do.....	48		
Sanborn.....	May 1-31.....	3		
Spink.....	Apr. 1-Aug. 31....	9		
Tripp.....	Apr. 1-June 30....	7		
Turner.....	July 1-31.....	5		
Total for State.....		230	1	
<b>*Tennessee:</b>				
<b>Counties—</b>				
Knox—				
Knoxville.....	June 18-July 22...	9		
Shelby.....	June 1-Aug. 31....	10		
Total for State.....		19		
<b>Texas.....</b>				
<b>Counties—</b>				
Brazoria.....	May 1-31.....	12		
Bell.....	July 1-31.....	1	1	
Cameron.....	Aug. 1-31.....	2		
Childress.....	June 1-30.....	2		
Collin.....	May 1-Aug. 31....	34		
Dallas.....	June 1-30.....	1		
do.....	May 1-31.....	5		
Denton.....	do.....	13		
do.....	do.....	1		
Eastland.....	Apr. 1-30.....	4		
El Paso.....	Aug. 1-31.....	5		
Floyd.....	May 1-July 31....	11		
Galveston.....	May 1-31.....	3		
Hall.....	May 1-June 30....	7		
Harris.....	do.....	4		
Hidalgo.....	May 1-Aug. 31....	6		
Hunt.....	May 1-31.....	3		
Marion.....	June 1-July 31....	5		
McLennan.....	May 1-31.....	1		
do.....	do.....	1		
Navarro.....	do.....	32		
Nueces.....	do.....	5		
Tarrant.....	May 1-June 30....	9		
Titus.....	May 1-31.....	5		
Victoria.....	July 1-31.....	1		
Wayne.....	June 1-30.....	5		
Wichita.....	May 1-31.....	6		
Total for State.....		184	1	
<b>Utah:</b>				
<b>Counties—</b>				
Beaver.....	May 1-July 31....	18		
Boxelder.....	do.....	31		
Cache.....	May 1-June 30....	14		
Carbon.....	May 1-Aug. 31....	113	2	
Emery.....	do.....	88	1	
Garfield.....	do.....	20		
Juab.....	do.....	5		
Kane.....	July 1-Aug. 31....	5		
Piute.....	May 1-31.....	9		
Rich.....	July 1-31.....	16		
Salt Lake.....	May 1-Aug. 31....	40		
Sanpete.....	do.....	35		
Sevier.....	do.....	48		

## SMALLPOX IN THE UNITED STATES—Continued.

Reports Received from July 1 to Oct. 13, 1911.

Places.	Date.	Cases.	Deaths.	Remarks.
<b>Utah—Continued.</b>				
<b>Counties—Continued.</b>				
Tooele.....	May 1-June 30....	33	.....	
Uinta.....	May 1-Aug. 31....	9	.....	
Utah.....	May 1-July 31....	18	1	
Washington.....	do.....	1	.....	
Weber.....	do.....	11	.....	
Total for State.....		509	4	
<b>Virginia:</b>				
<b>Counties—</b>				
Augusta.....	Aug. 1-31.....	1	.....	
Brunswick.....	Mar. 1-May 31....	49	.....	
Campbell.....	May 1-Aug. 31....	2	.....	
Dinwiddle.....	Apr. 1-May 31....	19	.....	
Essex.....	Aug. 1-31.....	1	.....	
Fairfax.....	Mar. 1-Aug. 31....	6	.....	
Fauquier.....	Apr. 1-May 30....	6	.....	
Greenville.....	July 1-31.....	4	.....	
Halifax.....	Aug. 1-31.....	1	.....	
Hanover.....	Mar. 1-July 31....	3	.....	
Henrico.....	Mar. 1-Aug. 31....	17	.....	
Henry.....	do.....	77	.....	
Isle of Wight.....	May 1-31.....	1	.....	
Lancaster.....	do.....	1	.....	
Lee.....	Mar. 1-Aug. 31....	107	.....	
Loudoun.....	Mar. 1-31.....	1	.....	
Mecklenburg.....	Mar. 1-June 30....	18	.....	
Nansemond.....	Mar. 1-Aug. 31....	24	.....	
Norfolk.....	Apr. 1-May 31....	26	.....	
Northampton.....	Apr. 1-30.....	1	.....	
Page.....	do.....	8	.....	
Pittsylvania.....	Mar. 1-July 31....	46	.....	
Prince William.....	Mar. 1-31.....	1	.....	
Princess Anne.....	do.....	1	.....	
Roanoke.....	May 1-31.....	1	.....	
Southampton.....	Mar. 1-Apr. 30....	9	.....	
Surry.....	Mar. 1-31.....	2	.....	
Sussex.....	Mar. 1-June 30....	7	.....	
Wise.....	do.....	15	.....	
Total for State.....		455	.....	
<b>Washington:</b>				
<b>Counties—</b>				
Benton.....	July 1-31.....	2	.....	
Chehalis.....	May 1-July 31....	4	.....	
Chelan.....	do.....	2	.....	
Columbia.....	May 1-31.....	5	.....	
Cowlitz.....	May 1-July 31....	4	.....	
Garfield.....	do.....	5	.....	
King.....	do.....	42	.....	
Kittitas.....	July 1-31.....	2	.....	
Mason.....	May 1-31.....	28	.....	
Pierce.....	May 1-July 31....	11	.....	
San Juan.....	May 1-31.....	1	.....	
Skagit.....	May 1-July 31....	5	.....	
Spokane.....	do.....	9	.....	
Thurston.....	May 1-31.....	1	.....	
Whatcom.....	do.....	5	.....	
Whitman.....	do.....	17	.....	
Yakima.....	May 1-July 31....	69	.....	
Total for State.....		212	.....	
<b>Wisconsin:</b>				
<b>Counties—</b>				
Ashland.....	June 1-30.....	1	.....	
Barron.....	do.....	3	.....	
Douglas.....	do.....	2	.....	
Iowa.....	do.....	8	.....	
Milwaukee.....	do.....	1	.....	
Vilas.....	do.....	1	.....	
Wood.....	do.....	2	.....	
Total for State.....		18	.....	
Grand total for the United States.....		4,054	26	

## PLAGUE IN THE UNITED STATES.

Reports Received from July 25 to Oct. 13, 1911.

Places.	Date.	Cases.	Deaths.	Remarks.
California:				
Counties—				
Alameda—				
Oakland.....	Aug. 9.....	1	.....	Infection received at Tinole Canyon, Contra Costa County, Cal.
Contra Costa.....	July 25-26.....	1	1	1 mile nw. of Lafayette.
San Joaquin.....	Sept. 18.....	1	.....	2 miles ne. of Ripon.

## MORBIDITY AND MORTALITY.

MORBIDITY AND MORTALITY TABLE, CITIES OF THE UNITED STATES, FOR WEEK ENDED SEPT. 30, 1911.

Cities.	Population, United States census 1910.	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Small- pox.		Tuber- culosis.		Ty- phoid fever.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Cities having over 500,- 000 inhabitants.														
Baltimore, Md.....	558,485	159	22	3	3	.....	21	.....	.....	.....	44	28	41	5
Boston, Mass.....	670,585	209	25	3	23	2	17	1	.....	.....	65	15	22	2
Chicago, Ill.....	2,185,283	544	159	14	3	.....	66	4	1	.....	194	62	47	4
Cleveland, Ohio.....	560,663	141	38	2	11	.....	26	.....	.....	.....	55	11	27	3
New York, N. Y.....	4,766,883	1,233	142	11	69	4	74	5	.....	.....	464	145	131	17
Philadelphia, Pa.....	1,549,008	408	102	7	9	1	26	.....	.....	.....	87	36	46	8
Pittsburgh, Pa.....	533,905	136	33	4	7	2	17	1	.....	.....	31	11	12	3
St. Louis, Mo.....	687,029	188	20	.....	1	.....	8	1	.....	.....	28	20	19	1
Cities having from 300,- 000 to 500,000 inhab- itants.														
Buffalo, N. Y.....	423,715	98	36	2	3	.....	13	3	.....	.....	13	10	16	1
Cincinnati, Ohio.....	364,463	106	23	1	1	.....	24	.....	.....	.....	22	14	11	1
Detroit, Mich.....	465,766	135	28	3	.....	.....	9	1	.....	.....	.....	.....	.....	.....
Los Angeles, Cal.....	319,198	77	2	.....	.....	.....	7	.....	.....	.....	19	11	9	.....
Milwaukee, Wis.....	373,857	92	11	2	3	.....	26	1	.....	.....	18	11	8	.....
Newark, N. J.....	347,469	96	17	1	.....	.....	15	.....	.....	.....	23	9	9	1
New Orleans, La.....	339,075	124	5	.....	.....	.....	13	.....	.....	.....	40	21	8	.....
San Francisco, Cal.....	416,912	124	2	.....	52	.....	4	.....	.....	.....	17	13	20	4
Washington, D. C.....	331,069	103	1	.....	3	.....	6	.....	.....	.....	30	14	30	1
Cities having from 200,- 000 to 300,000 inhab- itants.														
Denver, Colo.....	213,381	43	31	.....	.....	.....	7	.....	.....	.....	5	.....	.....	.....
Jersey City, N. J.....	267,779	67	.....	3	.....	.....	1	.....	.....	.....	7	.....	.....	1
Providence, R. I.....	224,326	71	11	1	1	.....	8	.....	.....	.....	12	7	9	1
Seattle, Wash.....	237,194	47	2	3	2	.....	2	.....	.....	.....	13	6	20	.....
Cities having from 100,- 000 to 200,000 inhab- itants.														
Bridgeport, Conn.....	102,054	20	1	.....	.....	.....	.....	.....	.....	.....	2	1	.....	.....
Cambridge, Mass.....	104,839	29	9	1	1	.....	4	.....	.....	.....	4	5	6	1
Columbus, Ohio.....	181,548	41	6	.....	3	.....	7	.....	.....	.....	10	5	6	2
Dayton, Ohio.....	116,577	27	3	.....	.....	.....	1	.....	.....	.....	1	3	9	.....
Fall River, Mass.....	119,295	34	1	2	.....	.....	4	.....	.....	.....	2	2	1	1
Grand Rapids, Mich.....	112,571	31	4	2	1	.....	1	.....	.....	.....	2	.....	2	.....
Lowell, Mass.....	106,294	27	1	.....	1	.....	4	.....	.....	.....	3	4	.....	.....
Nashville, Tenn.....	110,364	28	3	.....	.....	.....	3	.....	.....	.....	3	3	20	2
Omaha, Nebr.....	124,096	.....	9	.....	1	.....	.....	.....	.....	.....	2	.....	.....	1
Spokane, Wash.....	104,402	.....	.....	.....	.....	.....	1	1	.....	.....	.....	13	1	1
Toledo, Ohio.....	168,497	61	19	2	1	.....	6	.....	.....	.....	13	6	10	1
Worcester, Mass.....	145,986	51	15	1	.....	.....	8	.....	.....	.....	4	2	8	1

## MORBIDITY AND MORTALITY—Continued.

Morbidity and mortality table, cities of the United States, for week ended September 30, 1911—Continued.

Cities.	Popula- tion, United States census 1910.	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Small- pox.		Tuber- culosis.		Ty- phoid fever.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Cities having from 50,000 to 100,000 inhabitants.														
Altoona, Pa.	52,127	15	3								3			1
Bayonne, N. J.	55,545	16	1		1						3	2		
Brockton, Mass.	56,878	15			1						4		1	
Camden, N. J.	94,538	8	5				3							
Covington, Ky.	53,270	14	3									2		
Duluth, Minn.	78,466	12	3				2							
Elizabeth, N. J.	73,409	32	4		1							2		
Erie, Pa.	66,525	17	1								1	1	7	
Evansville, Ind.	69,647	15	2				1					2		
Harrisburg, Pa.	64,186	20	4		1						1	2	1	
Hartford, Conn.	98,915	30	17	1			5	1			6	3	13	
Hoboken, N. J.	70,324		2				1				1			
Houston, Tex.	78,800	23	1											
Jacksonville, Fla.	57,699	7	1					2				4		1
Johnstown, Pa.	55,482	18	1		2		2					2	5	
Kansas City, Kans.	82,331		4				1						1	
Lawrence, Mass.	85,892	18	4				4				2	3		
Lynn, Mass.	89,336	24	2				3				2	2	1	
Manchester, N. H.	70,063	32						1	1		1	1	3	
New Bedford, Mass.	96,652	36	3	1			1		1		4	1	6	
Oklahoma City, Okla.	64,205	13	2				4				2		2	2
Reading, Pa.	96,071	31	6				6		1		1	2	9	
San Antonio, Tex.	96,614	24	1	1					4			7	7	
Schenectady, N. Y.	72,826	12									4			
South Bend, Ind.	53,684	12	1											
Springfield, Ill.	51,678	12					1					1		1
Springfield, Mass.	88,926	27	6		4		1				1	1		1
Trenton, N. J.	96,815	16	2				5				4		6	
Wilkes-Barre, Pa.	67,105	18	4								2		2	
Wilmington, Del.	87,411	26										3		
Yonkers, N. Y.	79,803	21	3		4		5				5	2	2	
Cities having from 25,000 to 50,000 inhabitants.														
Atlantic City, N. J.	46,150	10												
Auburn, N. Y.	34,068	13										1		
Aurora, Ill.	29,867	7	1											
Berkeley, Cal.	40,434	6										2		
Binghamton, N. Y.	48,443	21			2		2				1	1	1	
Brookline, Mass.	27,792	5	1				2	1			2		1	
Butte, Mont.	39,165	17					3					2		
Chelsea, Mass.	32,452	10	2				3				2	1	3	
Chicopee, Mass.	25,401	5									1			
Danville, Ill.	27,871	7										1		
Dubuque, Iowa.	38,494	10	6									1	1	
East Orange, N. J.	34,371	9	3		1						2	1	1	
Elmira, N. Y.	37,176	6	4								2		1	
Everett, Mass.	33,484	6	1								1			
Haverhill, Mass.	44,115	11	1								1		2	
Kalamazoo, Mich.	39,437	20					1				2		1	2
Knoxville, Tenn.	36,346	11					2					2		
La Crosse, Wis.	30,417	6									1			
Lancaster, Pa.	47,227		2										3	
Lexington, Ky.	35,069	13	2				2				2	1		
Lima, Ohio.	30,508	8	4				1							
Lynchburg, Va.	29,494	12	2				2				1		3	
Malden, Mass.	44,404		2				1				3	2		
Montgomery, Ala.	38,136	9	16				3		2		4	1	2	1
Mount Vernon, N. Y.	30,919		1											
Newcastle, Pa.	36,280		16				1				3		2	
Newport, Ky.	30,309	8	4				1						1	1
Newton, Mass.	39,806	9			1						2	2	1	
Niagara Falls, N. Y.	30,445	12	1	2			1	1	1				6	2
Norristown, Pa.	27,875	6	3		1							1	1	
Orange, N. J.	29,630	7	6				1					1	1	
Pasadena, Cal.	30,291	17	1									2	1	1
Pittsfield, Mass.	32,121	18	2								13	3		



## MORBIDITY AND MORTALITY—Continued.

*Morbidity and mortality table, cities of the United States, for week ended September 30,  
1911—Continued.*

Cities.	Popula- tion, United States census 1910.	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Small- pox.		Tuber- culosis.		Ty- phoid fever.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Cities having from 25,000 to 50,000 inhabitants—Continued.														
Portsmouth, Va.	33,190	4	1										1	
Roanoke, Va.	34,874	7	12				4				2	2	10	1
Rockford, Ill.	45,401	14	2						3		1		8	1
Salem, Mass.	43,697	18										1		
San Diego, Cal.	39,578	19									3	3	1	1
South Omaha, Nebr.	26,259	2	2				2							
Superior, Wis.	40,384	7	1				1		4			1		
Taunton, Mass.	34,259	12	3				1					2	2	
Waltham, Mass.	27,834	6											2	
West Hoboken, N. J.	35,403	10	3				1				3			
Williamsport, Pa.	31,860	5											2	
Wilmington, N. C.	25,748	12		1										
York, Pa.	44,750												8	
Zanesville, Ohio.	28,026	7	2											
Cities having less than 25,000 inhabitants.														
Ann Arbor, Mich.	14,817	5	1									1		
Beaver Falls, Pa.	12,191										1		1	
Bennington, Vt.		3	1											
Braddock, Pa.	19,957	11	6				3						7	1
Butler, Pa.	20,728	8	4				7				2		3	
Cambridge, Ohio.	11,327	2			1									
Carbondale, Pa.	17,040	5					3							
Clinton, Mass.	13,075	2	1								1			
Coffeyville, Kans.	12,687										1	1	2	
Columbus, Ga.	20,554	41												1
Columbus, Ind.		4					1				1	2	1	
Concord, N. H.	21,497	8	1											
Cumberland, Md.	21,839	9	1				3				2		33	1
Dunkirk, N. Y.		3												
Ferdinand, Ind.		1											3	
Galesburg, Ill.	22,080	3	3											
Gonzales, Tex.					1									
Greensboro, N. C.	15,859		1				2					1	2	
Harrison, N. J.	14,198	5	3	1			1				2			
Homestead, Pa.	18,713	8	11	1										
Hyde Park, Mass.	15,507	1					1					1		
Kearney, N. J.	18,059	6	3											
La Fayette, Ind.	12,081	5									1			
Lebanon, Pa.	19,240										8		1	
Marinette, Wis.	14,610	1	1				1							
Marlboro, Mass.	14,579	3	1											
Massillon, Ohio.	13,879	3					1				1		1	
Medford, Mass.	23,150	6	1	1									1	
Melrose, Mass.	15,715	3									1		4	
Moline, Ill.	24,199	7												
Montclair, N. J.	21,150	6	3										3	
Morristown, N. J.	12,507										1			
Nanticoke, Pa.	18,877	7												1
Newburyport, Mass.	19,940	7												
North Adams, Mass.	22,019	3	1								1	1	4	
Northampton, Mass.	19,431	6												
Ottumwa, Iowa.	22,012	5												
Palmer, Mass.		3									1			
Peekskill, N. Y.		2									1	1		
Plainfield, N. J.	20,550	11	1								3		1	
Pottstown, Pa.		6		1										
Rutland, Vt.	13,546	5	2								2			
Saratoga Springs, N. Y.		5				1							1	
South Bethlehem, Pa.	19,973	6	2									1	16	1
South Range, Mich.		1									1	1		
Steelton, Pa.	14,246	2	6								8	1	4	
Warren, Pa.	11,080	6	1	1										
Wilkinsburg, Pa.	18,924	4					1				1			
Woburn, Mass.	15,308	5										1	3	

## FOREIGN AND INSULAR.

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### BRAZIL.

#### Para—Plague.

Consul Pickerell reports, September 18:

Two cases of plague were reported September 7. Both cases ended fatally.

### BULGARIA.

#### Cholera at Bourgas.

Information received from the foreign office at Sophia September 18 shows the occurrence from August 30 to September 6 of 3 cases of cholera with 2 deaths at Bourgas, a port of the Black Sea, in Bulgaria. The second case occurred in a member of the crew of a sailing vessel from Asia Minor. The body of the third case was found floating in the harbor of Bourgas. The three cases were bacteriologically verified.

### CHINA.

#### Hongkong—Plague.

Surg. Brown reports, September 4:

During the week ended September 2 two cases of plague with one death were reported. The number of rats collected during the same period was 1,587. No plague-infected rats were found.

### EAST AFRICA.

#### Plague.

Consul Weddell at Zanzibar reports, August 28:

To August 19, 38 cases of plague with 19 deaths were reported at Nairobi and 55 cases with 42 deaths at Kisumu.

### FRANCE.

#### Restriction of Importation of Shellfish.

Surg. Eager at Marseille reports, October 2:

By decree of the President of the French Republic dated September 14, 1911, the importation of shellfish from localities where cholera exists is prohibited.

### HAWAII.

#### Record of Plague Infection.

The last case of human plague at Honolulu occurred July 12, 1910.

The last plague-infected rat was found at Aiea, 9 miles from Honolulu, April 12, 1910.

At Hilo the last case of human plague occurred March 23, 1910. A fatal case occurred at Honokaa, 60 miles from Hilo, April 20, 1911.

The last plague-infected rat was found at Honokaa February 2, 1911. A plague-infected rat was found at Hilo during the week ended June 10, 1911.

Chief Quarantine Officer Ramus reports, September 25:

#### Honolulu—Plague-Prevention Work.

Week ended Sept. 23, 1911.

Total rats and mongoose taken.....	656
Rats trapped.....	551
Mongoose trapped.....	16
Rats shot from trees.....	84
Examined bacteriologically.....	537
Classification of rats trapped:	
<i>Mus alexandrinus</i> .....	56
<i>Mus musculus</i> .....	193
<i>Mus norvegicus</i> .....	49
<i>Mus rattus</i> .....	253
Classification of rats shot from trees:	
<i>Mus alexandrinus</i> .....	21
<i>Mus rattus</i> .....	63

#### INDIA.

##### Calcutta—Cholera and Plague.

Acting Asst. Surg. Allan reports, September 14 and 21:

During the week ended August 26, 10 deaths from cholera and 3 from plague were reported at Calcutta; in all Bengal, 20 cases of plague with 17 deaths; in all India, 5,493 cases of plague with 3,813 deaths.

During the week ended September 2 there were reported at Calcutta 16 deaths from cholera and 9 from plague; in all Bengal, 28 cases of plague with 20 deaths; in all India, 6,397 cases of plague with 4,590 deaths.

#### JAPAN.

##### Cholera at Osaka.

Acting Asst. Surg. Moore at Kobe reports, September 13, the occurrence of 4 cases of cholera with 1 death at Osaka.

#### MALTA.

##### Quarantine Measures Against Cholera and Plague.

The following regulations for the treatment of vessels arriving from localities infected with cholera or plague have been issued by the governor of Malta:

##### A.—Infected ships.

I. The sick shall be at once disembarked at the quarantine station at Comino and isolated.

II. The other persons on board shall be disembarked, if possible, and kept under observation at the quarantine station for a period not exceeding five days from the date of the death or isolation of the last case that occurred on board the ship, or during the period of observation. The quarantine medical officer may admit to pratique any passengers whose movements he may consider it possible to trace, upon their

undertaking, in writing, to report themselves to the district medical officer of their place of destination and to submit to medical examination within such period, not exceeding 10 days, as he may deem necessary.

III. Clothing and articles belonging to the crew and passengers, which, in the opinion of the quarantine medical officer, are infected, shall be destroyed or disinfected at the discretion of that officer.

IV. In the case of cholera the bilge water shall be disinfected and pumped out and fresh drinking water substituted for that which is stored on board.

V. Those parts of the ship that have been occupied by the sick shall be disinfected and also such other parts of the ship as the quarantine medical officer may regard as infected.

#### B.—*Suspected ships.*

I. Clothing and articles belonging to the crew and passengers, which, in the opinion of the quarantine medical officer, are infected, shall be destroyed or disinfected at the discretion of that officer.

II. In the case of cholera the bilge water shall be disinfected and pumped out and fresh drinking water substituted for that which is stored on board.

III. Those parts of the ship that have been occupied by the sick shall be disinfected, and also such other parts of the ship as the quarantine medical officer may regard as infected.

IV. The crew and passengers shall be medically inspected, and the passengers passed on medical inspection as healthy will be allowed to disembark, but may be required to submit to surveillance for a period of 5 days from the date of arrival.

V. Passengers who are suspected by the quarantine medical officer to be possibly infected will be detained under observation at the quarantine station for a period of 5 days from the date of arrival or, if disease occurs amongst them whilst under observation, from the date of the last case.

VI. The crew will not be allowed to land, except on duty, for 5 days from the arrival of the ship.

#### C.—*Healthy ships.*

I. Healthy ships shall be admitted to pratique immediately on arrival, irrespective of the nature of their bill of health.

II. Clothing and articles belonging to the crew and passengers may, at the discretion of the quarantine medical officer, be disinfected or destroyed.

III. In the case of cholera, the bilge water may be required to be disinfected and pumped out.

IV. The passengers may be subjected to surveillance during a period not exceeding 5 days, reckoned from the date on which the ship left the infected place. The crew will not be allowed to leave the ship during the same period except on duty.

V. In the case of plague, the quarantine medical officer may order that rats on board any ship arriving from an infected place be destroyed.

VI. When rats on a ship arriving from any place have been shown by bacteriological examination to have plague, or when unusual mortality among those rodents has been observed, the rats shall be destroyed, the ship disinfected, and the crew and passengers may be kept under surveillance for a period not exceeding 10 days from the date of arrival.

### PORTUGAL.

#### Measures to Prevent Introduction of Cholera.

Passed Asst. Surg. Sweet, at Oporto, reports September 30:

Measures to prevent the introduction of cholera into Portugal are still enforced. Detention hospitals have been erected at frontier points and all incoming trains are boarded by a sanitary officer. All passengers are required to report daily for a period of seven days to the sanitary officer of the district to which they are destined. The customary quarantine measures, including a bacteriological examination of those coming from infected ports, are carried out.

**ROUMANIA.****Status of Cholera.**

Information received from the American Legation at Bucharest shows that from September 11 to 21, 18 cases of cholera with 13 deaths were reported in Roumania. Of these, 10 cases occurred in the city of Braila. Additional measures of precaution have been taken at Braila and Galatz with regard to factory employees and members of crews of steamers.

**RUSSIA.****Status of Cholera.**

Information received from the American Embassy at St. Petersburg October 7 shows the occurrence of 316 cases of cholera with 123 deaths in Russia from September 23 to date of report.

**TRINIDAD.****Examination of Rats.**

Acting Asst. Surg. Layton reports, September 30:

During the two weeks ended September 22, 1,865 rats were examined for plague infection. Of these, 451 were *Mus norvegicus*, 221 *Mus rattus*, and 1,193 *Mus musculus*. No plague-infected rat was found.

**TRIPOLI.****Cholera.**

The American consul reports, October 13, the occurrence of 4 cases of cholera at Tripoli.

**TUNIS.****Status of Cholera.**

Information received through Consul General Gaulin at Marseille dated September 27 shows cholera officially reported present in epidemic form in the city and district of Tunis. From September 17 to 19, 156 cases with 85 deaths were reported. (Population, estimated, 180,000.) On September 20, 36 cases with 29 deaths were reported for Tunis and 25 cases with 9 deaths at Bizerta. From September 18 to 22, 332 cases of cholera were reported for the regency of Tunis. (Population, estimated, 2,000,000.)

**TURKEY.****Smyrna-Cholera.**

The American vice consul reports, September 18, the occurrence of 50 cases of cholera with 30 deaths from September 11 to 17, inclusive.



## CHOLERA, YELLOW FEVER, PLAGUE, AND SMALL POX.

## Reports Received During Week Ended Oct. 20, 1911

[These tables include cases and deaths recorded in reports received by the Surgeon General, Public Health and Marine-Hospital Service, from American consuls through the Department of State, and from other sources.]

## CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
<b>Austria-Hungary:</b>				
Budafok.....	Sept. 9-16.....	1		
Budapest.....	do.....	5		
Draga.....	Sept. 7.....	1		
Krimeja.....	do.....	1		
Nagykeszi.....	Sept. 9-16.....	3		
Ujpest.....	do.....	13		
Vukovar.....	Sept. 8-9.....	2	2	
<b>Bulgaria:</b>				
Bourgas.....	Aug. 30-Sept. 6....	3	2	Cases, Sept. 1, from the sailing vessel Eptisia from Asia Minor.
<b>Dutch East Indies.....</b>				<sup>1</sup> June 10-July 9: Cases, 442; deaths, 362.
<b>India:</b>				
Calcutta.....	Aug. 20-Sept. 2....		26	
Madras.....	Sept. 3-16.....	2	1	
<b>Indo-China:</b>				
Salon.....	Aug. 21-27.....	3	3	
<b>Italy.....</b>				Total for Italy Sept. 10-16: Cases, 959; deaths, 328. Sept. 17-23: cases, 664; deaths, 280.
Provinces—				
Catania.....	Sept. 10-16.....	64	28	
Catania.....	do.....	20	5	
Genoa.....	do.....	23	4	
Genoa.....	do.....	14	2	
Naples.....	do.....	21	8	
Naples.....	do.....	12	2	
Palermo.....	do.....	19	10	
Palermo.....	do.....	34	10	
Rome.....	do.....	5	2	
Rome.....	do.....	6	3	
Thirty-one other Provinces.....	do.....	741	254	
<b>Japan:</b>				
Kobe.....	Aug. 31-Sept. 10....	2	1	
Osaka.....	Aug. 31-Sept. 16....	3		
<b>Java:</b>				
Batavia.....	Aug. 27-Sept. 2....	10	5	
<b>Persia:</b>				
Abadan.....	July 29-Aug. 4....	19	<sup>1</sup> 8	
Ahwaz.....	Aug. 13-Sept. 2....	128	<sup>2</sup> 115	
Mohammerah.....	Aug. 13-Sept. 9....	120	<sup>2</sup> 101	
<b>Roumania.....</b>				Total to Sept. 21: Cases 18; deaths, 13.
<b>Servia:</b>				
Ravta.....	Aug. 30-Sept. 12....			Present.
<b>Straits Settlements:</b>				
Singapore.....	Aug. 20-Sept. 2....	4	8	
<b>Tripoli:</b>				
Tripoli.....	Oct. 13.....	4		
<b>Tunis Regency.....</b>				Total Sept. 17-20: Cases, 217 deaths, 123.
Bizerta.....	Sept. 20.....	25	9	
Tunis.....	Sept. 17-20.....	74	34	
<b>Turkey:</b>				
Constantinople.....	Sept. 12-25.....	387	231	
Salonica.....	Sept. 11-24.....	54	39	
<b>Turkey in Asia:</b>				
Basra.....	Sept. 10-23.....	60	50	
Damascus.....	Aug. 14-Sept. 15....	22	17	
Jiddah.....	Sept. 21.....	1		
Kerasunde.....	Sept. 10-23.....	10	5	
Kharput.....	Sept. 9-16.....	18	15	
Medina.....	Sept. 7-22.....	53	29	
Mekka.....	Sept. 11-24.....	121	116	
Trebizond.....	Sept. 21.....		1	From Constantinople.
Smyrna.....	Sept. 11-24.....	70	39	
Zongouldac.....	Sept. 11-24.....	24	20	

<sup>1</sup> Bulletin Quarantenaire d'Egypte, Sept. 14, 1911.

<sup>2</sup> From the Veröffentlichungen des Kaiserlichen Gesundheitsamtes, Sept. 6-Oct. 4.

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## CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received During Week Ended Oct. 20, 1911.

## YELLOW FEVER.

Places.	Date.	Cases.	Deaths.	Remarks.
Brazil: Manaos.....	Sept. 11-23.....	.....	5	.

## PLAGUE.

British East Africa: Kismayu.....	Aug. 6-16.....	3	.....	
Brazil: Pernambuco.....	Aug. 16-31.....	.....	3	
Chile: Iquique.....	Aug. 6-Sept. 9....	16	10	
China: Hongkong.....	Aug. 27-Sept. 2....	2	1	
India: Bombay.....	Sept. 3-16.....	36	28	
Calcutta.....	Aug. 20-Sept. 2....	.....	12	
Karachi.....	Sept. 3-9.....	4	4	
Indo-China: Saigon.....	Aug. 21-27.....	9	4	
Java: Paserocean Residency.....	Aug. 27-Sept. 2....	26	8	
Straits Settlements: Singapore.....	do.....	1	1	

## SMALLPOX.

Arabia: Aden.....	Aug. 22-28.....	1	.....	
Brazil: Pernambuco.....	Aug. 16-31.....	.....	140	
Canada: Ottawa.....	Oct. 1-7.....	2	.....	
Ceylon: Colombo.....	Aug. 20-Sept. 2....	2	1	
China: Hongkong.....	Aug. 27-Sept. 2....	4	4	
India: Bombay.....	Sept. 3-16.....	9	7	
Madras.....	do.....	9	6	
Indo-China: Saigon.....	Aug. 20-27.....	7	2	
Italy: Naples.....	Sept. 17-23.....	5	.....	
Palermo.....	do.....	50	28	
Java: Batavia.....	Aug. 27-Sept. 2....	5	1	
Mexico: Cananea.....	Sept. 13-22.....	10	.....	And in vicinity.
Imuris.....	Sept. 22.....	10	.....	
Porfirio Diaz.....	Sept. 24-30.....	1	.....	
Tampico.....	Sept. 21-30.....	.....	1	
Straits Settlements: Singapore.....	Aug. 10-Sept. 2....	15	6	
Turkey in Asia: Beirut.....	Sept. 17-23.....	20	4	
Uruguay: Montevideo.....	July 1-31.....	3	2	
Zanzibar.....	Aug. 7-Sept. 1....	2	1	

## CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

## Reports Received from July 1, to Oct. 13, 1911.

[For reports received from Dec. 31, 1910, to June 30, 1911, see Public Health Reports for June 30, 1911. In accordance with custom, the tables of epidemic diseases are terminated semiannually and new tables begun.]

## CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Arabia:				
Hodeida.....	June 16-30.....	21	17	Among the civil and the military population. Aug. 5, present among troops.
Austria-Hungary.....				Total Austria-Hungary, May 24-Sept. 17, 73 cases, 30 deaths. District of Zara.
Arbe Salle Sampiero.....	Aug. 21-Sept. 17....	6	3	
Budapest.....	Aug. 24-Sept. 9....	7	3	
Campodistria.....	July 23-Sept. 10....	9	5	
Cattaro.....	July 6-20.....	4	1	
Cittanuova.....	Aug. 21-27.....	1	1	
Czarp.....	Aug. 24-Sept. 9....	1		
Fiume.....	Aug. 9-17.....	3		
Krizovljan.....	Aug. 28-Sept. 3....	2		
Muggia.....	Aug. 7-13.....	2	1	
Suly.....	Sept. 2-9.....	3	1	
Susac-Draga.....	Aug. 28-Sept. 7....	2		
Trieste.....	June 4-Aug. 26....	42	16	July 8, the second case from s. s. Oceania. Case July 21, from s. s. Bandiera Moro.
Ujpest.....	Aug. 24-Sept. 2....	4	3	
Vienna.....	Aug. 14-Sept. 17....	5	2	
Waltendorf.....	May 31.....	1		Second case. Near Gratz.
Bulgaria:				
Kalondjik.....	June 18-20.....	1	1	Vicinity of Choumen. From the ship Cyrille, bound from the coast of Asia Minor.
Varna.....	July 4-Aug. 5.....	2	2	From Asia Minor via Constantinople.
Ceylon:				
Colombo.....	May 21-July 29....	16	11	
China:				
Amoy.....	May 28-July 1.....		4	Aug. 5, present.
Hankow.....	July 22.....			Present.
Hoihow.....	June 2.....			Do.
Manchuria—				
Dalny.....	Aug. 19-Sept. 2....	35	19	Sept. 5, present.
Kinchow.....	Aug. 15-Sept. 2....	10		
Nanking.....	July 22-Aug. 19....			Present.
Swatow.....	July 22-Aug. 26....			Do.
Dutch East Indies.....				June 10-July 9: Cases, 442; deaths, 362.
Java—				
Batavia.....	May 14-Aug. 26....	213	198	
Beloe.....	June 15-28.....			Present.
Surabaya.....	Apr. 10-May 6.....	44	22	
France:				
Marselle.....	June 26-Aug. 31....		76	Mainly in the asylum. To Aug. 23: Cases, 95; deaths, 35.
Greece:				
Laurium.....	July 5-8.....	3	1	Case July 5, from a German vessel via Naples.
Piræus, quarantine station.	July 30-Aug. 8.....	3		Case July 30, from s. s. Margarita.
India:				
Bassein.....	May 7-July 8.....	2	2	
Bombay.....	June 23-July 1.....	3	3	
Calcutta.....	May 7-Aug. 19....		435	
Madras.....	June 4-Sept. 2....	16	10	May 1-July 31: Cases, 17,559; deaths, 9,514.
Moulmine.....	May 7-June 17....	4	4	
Negapatam.....	June 11-July 15....		35	
Rangoon.....	May 1-June 30....	31	26	
Indo-China:				
Saigon.....	May -Aug. 20....	70	43	
Italy.....				Total for Italy, June 8-Sept. 23: Cases, 14,031; deaths, 5,281.
Provinces—				
Alessandria.....	Aug. 1-26.....	97	23	
Aquila.....	do.....	47	14	
Avellino.....	July 12-Aug. 26....	161	56	
Benevento.....	July 22-Aug. 26....	56	13	
Caltanissetta.....	July 17-Aug. 26....	152	27	
Campobasso.....	do.....	418	116	
Caserta.....	June 18-Aug. 26....	1,372	557	
Catania.....	July 22-Aug. 26....	455	199	

## CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from July 1 to Oct. 13, 1911.

## CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
<b>Italy—Continued.</b>				
<b>Provinces—Continued.</b>				
Catanzaro.....	July 26-Aug. 26...	108	48	
Chieti.....	Aug. 1-26.....	42	19	
Cosenza.....	Aug. 20-26.....	14	3	
Foggia.....	do.....	4	3	
Genoa.....	July 21-Aug. 26.....	265	85	
Genoa, city.....	July 13-Aug. 26.....	223	117	
Girgenti.....	July 22-Aug. 26.....	34	10	
Leghorn.....	July 13-Sept. 2.....	634	319	
Lucca.....	Aug. 1-5.....	2	2	
Massa.....	Aug. 13-26.....	14	13	
Messina.....	July 17-Aug. 26.....	65	17	
Milan.....	Aug. 27-Sept. 2.....	18	6	
Naples.....				The Province outside of Naples, June 10-Sept. 9: 1,303 cases; 550 deaths.
Naples, city.....	June 11-Sept. 9.....	910	263	
Salerno.....	June 17-Aug. 26.....	1,190	282	
Palermo.....	June 18-Sept. 9.....	399	187	
Palermo, city.....	June 15-Sept. 9.....	1,292	420	
Pesaro.....	Aug. 20-26.....	18	2	
Pisa.....	do.....	11	4	
Potenza.....	July 31-Aug. 26.....	40	12	
Reggio.....	Aug. 6-19.....	2	2	
Rome.....	June 27-Sept. 2.....	146	90	
Salerno.....	June 18-Aug. 26.....	1,190	282	
Siracusa.....	Aug. 6-26.....	21	2	
Trapani.....	July 17-Aug. 26.....	102	50	
Venezia.....	Aug. 6-26.....	82	27	
<b>Japan:</b>				
Kobe.....	Aug. 30.....	2		
Nagasaki.....	Sept. 11.....	1		On s. s. Kasuga Maru.
Nishomayo.....	Aug. 28-Sept. 3.....	2		
Osaka.....	Aug. 30.....	3		Sept. 3, present.
Montenegro.....	Aug. 14-17.....	4		Among troops.
Cettinje.....	July 29.....	2		
<b>Persia:</b>				
Mohammerah.....	July 28-Aug. 12.....	91	76	Case July 28, from the cruiser Persepolis.
<b>Philippine Islands.....</b>				
Manila.....	July 23-29.....	1	1	First quarter, 1911: Manila, no cases. Provinces, 199 cases and 160 deaths.
Provinces—				
Rizal.....	do.....	1		
Union.....	July 23-Aug. 5.....	4	3	
<b>Roumania:</b>				
Braila.....	Sept. 11.....	6	4	Sept. 13: 3 cases and 2 deaths in a village in vicinity.
<b>Russia.....</b>				
Astrakhan.....	July 12-Sept. 2.....	316	138	
Baku—				
Baku, city.....	July 8-26.....	5	1	
Dagestan.....	Aug. 13-19.....	27		
Jaroslav.....	Aug. 20-26.....	8	3	
Khasan—				
Kosmodemiansk.....	July 2.....	1		
Kherson.....	May 3-July 22.....	2		
Khuban.....	Aug. 13-26.....	1	2	
Moscow.....	Aug. 13-19.....	1		
Moscow.....	Aug. 20-26.....	1	1	
Nijni Novgorod.....	Aug. 27-Sept. 2.....	1		
Novoryssik.....	July 28-Sept. 2.....	9	3	6 cases, July 28-Aug. 6, on British steamer Wakefield in Black Sea.
Odessa.....	Aug. 6-12.....	2	1	
Poltava.....	June 24.....	1		
Rostov on Don.....	Aug. 6-Sept. 2.....	26	10	Aug. 6-12, 1 case from a Turkish ship from Trebizond.
Samara.....	June 29-Sept. 2.....	682	390	Including Nikolayevsk.
Saratov.....	July 18-Sept. 2.....	102	49	
Nikolayevsk.....	June 29-July 3.....	15	1	
Siberia—				
Omsk.....	June 20-26.....	2		

## CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from July 1 to Oct. 13, 1911.

## CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
<b>Russia—Continued.</b>				
Simbirsk .....	Aug. 6-Sept. 2....	69	41	
Stavropol .....	July 23-Aug. 19...	7	1	
Tambov .....	June 26-Sept. 2....	17	8	
Vilna—				
Disna .....	June 13.....	1	.....	On the Duna.
Vitebsk—				
Lepel district.....	June 19.....	1	1	
Tver and Kursk.....	Aug. 6-12.....	1	.....	
Voronesh .....	Apr. 28-Aug. 12....	5	4	
Yekaterinislav .....	July 8-19.....	2	1	
Zarizyn .....	July 12-15.....	1	1	
<b>Servia:</b>				
Belgrade .....	Sept. 9.....	.....	.....	Present.
Rachka .....	Aug. 23-Sept. 8....	8	2	Case Aug. 23 from Beoca, Studenitz district.
<b>Siam:</b>				
Bangkok .....	Apr. 16-Aug. 5....	939	939	
<b>Spain:</b>				
Tarragona .....	Aug. 30.....	.....	.....	In vicinity.
<b>Straits Settlements:</b>				
Began Dotah .....	June 16-20.....	11	.....	
Jenderata .....	July 1-8.....	20	13	
Penang .....	May 7-Aug. 12....	8	11	
Perak .....	May 16-June 21....	.....	.....	Present among Malays and Chinese.
Singapore .....	May 7-Aug. 19....	82	90	
<b>Tunis:</b>				
Tunis .....	Aug. 1-7.....	.....	6	Sept. 26, present.
<b>Turkey:</b>				
Constantinople .....	May 21-Sept. 11....	1,800	982	And vicinity.
Medua .....	Aug. 24-Sept. 1....	5	1	
Soloniki .....	Aug. 11-Sept. 10....	110	50	Among troops.
Valona .....	Aug. 27-Sept. 7....	28	8	
<b>Turkey in Asia:</b>				
Alatsham .....	June 19.....	2	.....	
Amara .....	June 21.....	.....	.....	Present.
Bagdad Vilayet.....	May 29-Sept. 9....	296	212	New outbreak.
Basra .....	July 17-Sept. 9....	222	154	Aug. 9, 1 case, s. s. Budrie.
Beirut .....	Aug. 21.....	.....	.....	Present among pilgrims.
Erzeroum, vilayet.....	Sept. 13.....	.....	.....	Present in Erzincan and Kerassunde.
Ezra's Tomb .....	June 17.....	6	.....	70 miles from Basra.
Foglieri .....	July 26.....	2	1	In the Gulf of Smyrna.
Harput .....	Aug. 20-Sept. 9....	27	22	And vicinity.
Kamaran .....	May 28-July 11....	8	5	Among troops.
Kavak .....	June 5-11.....	1	.....	Aug. 8, present.
Mekka .....	Sept. 1-10.....	231	198	
Samsun .....	May 20-July 30....	225	204	And district.
Smyrna .....	Apr. 26-Sept. 10....	904	458	Including 24 cases and 14 deaths, p. 1911, vol. 2.
Zongouldak .....	July 1-Sept. 10....	58	37	And vicinity.
At sea .....	June 23.....	1	1	On s. s. Goeben, bound from Southampton for Suez. Case developed one day after leaving Naples.
Do .....	July 25.....	.....	.....	Two cases from s. s. Zar Nicolaus from Algiers.

## YELLOW FEVER.

<b>Brazil:</b>				
Ceara .....	July 1-31.....	.....	1	
Manaos .....	June 4-Sept. 9....	.....	14	
Para .....	June 21-Sept. 9....	5	1	
Pernambuco .....	June 15-Aug. 15....	.....	8	Sept. 4, present.
<b>Bissagos Islands:</b>				
Bulama .....	May 27.....	.....	.....	Present.
<b>British Gold Coast:</b>				
Accra .....	May 23-27.....	3	.....	Among natives.
<b>Ecuador:</b>				
Babahoyo .....	July 16-Aug. 15....	2	2	
Calaroma .....	July 16-31.....	1	1	
Guayaquil .....	June 1-Aug. 31....	30	10	
Milagro .....	June 1-Aug. 15....	17	13	
Naranjito .....	July 1-15.....	2	.....	
Yaguachi .....	June 16-July 15....	1	1	



## CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

## Reports Received from July 1 to Oct. 13, 1911.

## YELLOW FEVER—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Gambia:				
Bathurst.....	May 23-27.....	5	2	Among Europeans.
Mexico:				
Merida.....	.....	.....	.....	Total Aug. 1-Sept. 30: Cases, 30; deaths, 11.
Venezuela:				
Caracas.....	July 1-Sept. 9.....	22	1	Present.
La Pastora.....	Aug. 5.....	.....	.....	
Maiquetia.....	July 22.....	2	.....	
San Juan.....	Aug. 5.....	1	.....	

## PLAGUE.

Arabia:				
Maskat.....	May 21-June 15....	4	2	
Brazil:				
Para.....	July 2-Sept. 9.....	5	4	Sept. 16, 2 cases.
Pernambuco.....	June 15-Aug. 15....	.....	4	Sept. 4, present.
Rio de Janeiro.....	July 16-Sept. 9....	13	3	Oct. 9, 1 case.
British East Africa:				
Kismayu.....	Apr. 24-Aug. 5.....	52	42	
Nairobi.....	May 27-Aug. 5.....	34	19	
Port Florence.....	Apr. 26.....	1	1	
Chile:				
Arica.....	June 12-July 28....	4	3	
Iquique.....	May 14-Aug. 26....	23	13	
China:				
Amoy.....	May 21-July 17....	.....	20	To May 28: Cases, 61; July 8, present in the district.
Kulangsu.....	June 17-July 22....	.....	5	
Canton.....	May 18-Aug. 12....	.....	.....	Present, and in neighboring cantons.
Hongkong.....	May 14-Aug. 26....	207	155	Jan. 1-Aug. 15: Cases, 259; deaths, 240.
Shanghai.....	Aug. 10-26.....	31	19	May 14-27, 3 cases.
Swatow.....	May 21-July 22....	.....	.....	May 21-June 2, epidemic in Chao-chow-fu. Hweilai, Kit-yang, and in Chao-Yang, Jan. 1-June 30, 6,000 deaths.
Ecuador:				
Guayaquil.....	June 1-Aug. 31....	28	11	
Egypt:				
Alexandria.....	May 31-Sept. 12....	42	18	
Cairo.....	Feb. 12-May 31....	1	1	
Port Said.....	May 27-Sept. 3....	35	15	On s. s. Yeddo, bound for Calcutta from New York, via Naples and Torre Vieja, Spain.
Provinces—				
Assiout.....	May 31-July 9.....	7	5	
Behera.....	May 23-Sept. 4.....	3	.....	
Beni Souef.....	May 23-Aug. 10....	4	1	
Dakahlieh.....	May 29-June 11....	2	1	
Fayoum.....	May 28-June 17....	8	5	
Galioubeh.....	June 1-Aug. 22....	2	2	
Girgeh.....	Apr. 19-July 7.....	5	4	
Kena.....	May 30-June 12....	5	5	
Minieh.....	June 1-July 27....	29	11	
India:				
Bahrain Island.....	May 15-July 16....	.....	1,720	In Persian Gulf.
Bombay.....	May 21-Sept. 2.....	588	517	
Calcutta.....	May 7-Aug. 12.....	.....	599	
Kurrachee.....	May 28-Sept. 8.....	211	208	
Rangoon.....	May 1-July 31.....	9,843	7,108	
Bombay Presidency and Sind.....	May 7-Aug. 26....	20,507	14,170	
Madras Presidency.....	do.....	2,467	1,777	
Bengal.....	do.....	2,622	2,360	
United Provinces.....	do.....	18,084	17,521	
Punjab.....	do.....	60,877	53,359	
Burma.....	do.....	1,731	1,607	
Eastern Bengal and Assam.....	Aug. 6-26.....	2	12	
Central Provinces.....	May 7-Aug. 26....	603	351	
Mysore State.....	do.....	5,197	3,639	
Hyderabad State.....	do.....	431	347	
Central India.....	do.....	223	149	

## CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

## Reports Received from July 1 to Oct. 13, 1911.

## PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
<b>India—Continued.</b>				
Rajputana and Ajmere	May 20-Aug. 26...	1,690	1,452	
Merwara.				
Kashmir.	May 7-July 1.....	624	425	
North West Province.	do.....	110	79	
Grand total.....		115,168	97,248	
<b>Indo-China:</b>				
Saigon.....	May 15-Aug. 20...	317	96	
<b>Japan:</b>				
Formosa.....	May 21-July 1.....	115	106	In Kagi Province from Jan. 1-June 15: Cases 355, including report, p. 1047, vol. 1.
<b>Java:</b>				
Kediri.....	Mar. 31-July 22.....	60	21	
Madison.....	June 1-Aug. 26.....	2		
Paseroean Residency.....	May 14-Aug. 26.....	589	231	
Surabaya.....	Apr. 30-May 18.....	21	4	
Mauritius.....	Mar. 1-July 10.....	10	6	
<b>Morocco:</b>				
Mazagan.....	July 13.....			Present among the Doukala, 5 hours distant.
<b>New Zealand:</b>				
Auckland.....	May 1-8.....	5		Total since Mar. 21: Cases, 8; deaths, 1.
<b>Paraguay:</b>				
Asuncion.....	Aug. 1-9.....		8	Present.
<b>Persia:</b>				
Buchir.....	May 14-June 25.....	94	80	
Lingah.....	May 18-28.....	7		From Debai, on opposite Arabian coast.
<b>Peru:</b>				
<b>Departments—</b>				
Ancachs.....	Apr. 30-June 17.....	9	2	
Arequipa.....	Apr. 23-June 17.....	20	4	
Cañamarca.....	do.....			Aug. 10, present.
Callao.....	do.....	5	2	Sept. 24, 1 case.
Chiclayo.....	Apr. 30-July 22.....	14	5	
Lambayeque.....	Apr. 23-June 3.....	24	12	
Libertad.....	Apr. 23-July 22.....	17	7	Aug. 21, present in Moche.
Lima.....	do.....	47	17	
Pacasmayo.....	Apr. 30-June 3.....	3	2	
<b>Philippine Islands.</b>				
Mariveles quarantine station.	May 25-26.....	1	1	First quarter, 1911: Manila, no cases; Provinces, no cases. From s. s. Taisang from Amoy.
<b>Russia:</b>				
Odessa.....	June 18-Aug. 8.....	8	2	
<b>Afghanistan Government—</b>				
Ujaly.....	July 3.....			Present.
Saraltschin.....	June 18-24.....	3	3	
<b>Kirghis Steppe—</b>				
Akbulak.....	July 13-Aug. 2.....	5	2	Pneumonic.
Kjubekudik.....	July 15.....	5	4	Do.
Naryma.....	June 24.....	4	4	
<b>Siam:</b>				
Bangkok.....	Apr. 16-Aug. 5.....	72	72	
<b>Straits Settlements:</b>				
Singapore.....	May 21-Aug. 5.....	5	5	
<b>Turkey in Asia:</b>				
Adalia.....	July 7-Aug. 30.....	4		
Basra.....	May 21-31.....	4	2	
Beirut.....	Aug. 21.....			Present among pilgrims, and present in the Lebanon district.
Brusa.....	Aug. 2-15.....	2		
<b>Venezuela:</b>				
Baruta.....	Sept. 3-9.....			
Caracas.....	May 29-Sept. 9.....	10		
Santa Rosalia.....	Aug. 5.....	1		

## SMALLPOX.

<b>Algeria:</b>				
<b>Departments—</b>				
Algiers.....	Mar. 1-Aug. 31.....	5	2	July 1-31, 5 deaths.
Constantine.....	Mar. 1-May 31.....	74		

## CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from July 1 to Oct. 13, 1911.

## SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Arabia:				
Aden.....	Apr. 11-July 18....	203	7	And vicinity.
Argentina:				
Buenos Aires.....	Apr. 1-June 30.....		89	
Rosario.....	do.....		125	
Austria-Hungary:				
Bohemia.....	May 28-June 17.....	5		
Galicia.....	May 28-July 15.....	3		
Brazil:				
Bahia.....	Apr. 1-30.....		1	
Ceara.....	June 1-30.....		1	
Para.....	June 25-Sept. 16....	9	2	
Pernambuco.....	June 1-Aug. 31.....		488	
Rio de Janeiro.....	May 28-Sept. 9.....	24	1	
Sao Paulo.....	May 15-21.....		1	
Canada:				
British Columbia—				
Vancouver.....	July 9-Sept. 23.....	8		
Victoria.....	May 1-31.....	10		
Manitoba—				
Fort Alexander.....	July 8.....	19		Among Indians.
Lac de Bonnet.....	do.....	1		
Point du Bois.....	do.....			Epidemic.
Selkirk.....	do.....	1		From Mapleton.
Winnipeg.....	July 23-29.....	1		
New Brunswick—				
Newcastle.....	July 15-Aug. 5.....			Present in vicinity.
Ontario—				
Ottawa.....	June 11-Aug. 12....	23		
Nova Scotia—				
Halifax.....	May 23-Sept. 30....	6		
Prince Edward Island—				
Charlottetown.....	June 14-20.....	1		
Quebec—				
Montreal.....	July 9-Sept. 30.....	7		
Quebec.....	June 18-Sept. 30....	14		
Yukon.....	Sept. 17.....	66	1	On the Porcupine.
Dawson.....	June 4-July 1.....	15		
Ceylon:				
Colombo.....	May 21-Aug. 19....	35	2	
Chile:				
Caldera.....	June 24.....	2	1	
Punta Arenas.....	June 1-July 31.....	3	1	
Talcahuano.....	June 27-Sept. 9.....	104	25	
Valparaiso.....	June 24-Sept. 2.....	268		
China:				
Chungking.....	May 28-Aug. 19.....			Present.
Hongkong.....	May 21-Aug. 26.....	26	19	
Nanking.....	May 23-Sept. 9.....			Do.
Shanghai.....	May 24-July 16.....	2	8	Deaths among natives.
Swatow.....	May 28-July 22.....			Present in the district.
Colombia:				
Cartagena.....	May 22-July 9.....			Present.
Egypt:				
Alexandria.....	Apr. 1-July 31.....	64	32	
Cairo.....	May 22-Aug. 19....	11	4	
Port Said.....	May 29-Aug. 19....	14	13	
France:				
Havre.....	July 16-22.....	1	1	
Marseille.....	Aug. 1-31.....		1	
Paris.....	June 18-Aug. 26....	9		
Germany:				
Bremen.....	July 9-15.....	1		Total for Germany, June 4-Sept.
Hamburg.....	Aug. 6-19.....			9: Cases, 24.
Gibraltar.....	June 4-Sept. 10....	2		3 cases on s. s. Prinz Regent.
Great Britain:				
Birmingham.....	July 2-15.....	1	1	
Dundee.....	June 11-Aug. 12....	10	3	
Liverpool.....	June 18-July 8.....	2		
London.....	June 4-24.....	13		
Plymouth.....	July 2-8.....		1	
Sheffield.....	June 18-24.....		1	
India:				
Bombay.....	May 21-Sept. 2.....	106	87	
Calcutta.....	May 7-June 24.....		6	
Madras.....	May 21-Sept. 2.....	129	53	
Rangoon.....	May 1-July 31.....	333	161	
Indo-China:				
Saigon.....	May 15-Aug. 20....	114	46	

## CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from July 1 to Oct. 13, 1911.

## SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Italy:				
Catania.....	July 19-Aug. 12....	.....	4	
Genoa.....	Aug. 1-15.....	2	.....	
Naples.....	June 11-Sept. 16....	74	10	
Palermo.....	June 4-Sept. 16....	416	252	
Rome.....	Mar. 1-31.....	1	1	
Japan:				
Yokohama.....	June 13-19.....	1	.....	
Java:				
Batavia.....	July 2-Aug. 26....	19	7	
Malta:				
Valetta.....	June 6-12.....	1	.....	
Mexico:				
Aguascalientes.....	Aug. 28-Sept. 24....	.....	3	
Cananea, mines.....	Sept. 12.....	20	.....	
Chihuahua.....	June 28-Sept. 10....	22	10	
Frontera.....	June 19-24.....	1	.....	
Guadalajara.....	June 18-Aug. 19....	.....	3	
Juarez.....	July 9-Sept. 30....	23	6	
Mazatlan.....	Aug. 6-Sept. 9....	13	4	
Mexico.....	May 21-Sept. 2.....	.....	155	July 23-Sept. 30, 65 cases.
Porfirio Diaz.....	July 23-Sept. 23....	8	7	
San Juan Bautista.....	June 17-July 15....	.....	.....	Present and in vicinity. Aug. 26 increasing.
San Luis Potosi.....	June 4-Sept. 2.....	15	15	
Tampico.....	June 11-Aug. 30....	.....	7	
Peru:				
Salaverry.....	Aug. 1-7.....	.....	.....	Present.
Philippine Islands.....				First quarter, 1911, Manila: Cases, 93; deaths, 0.
Portugal:				
Lisbon.....	June 4-Sept. 16....	88	.....	May 7-20, deaths 3.
Porto Rico:				
Ponce.....	Apr. 1-30.....	.....	1	
Portuguese East Africa:				
Lourenco Marquez.....	do.....	.....	1	
Russia:				
Batoum.....	May 1-June 30....	3	.....	
Libau.....	June 5-Sept. 10....	13	1	July 16, 1 death.
Moscow.....	May 28-Sept. 9....	158	83	
Odessa.....	May 27-Sept. 16....	8	.....	
Reval.....	May 1-31.....	5	.....	
Riga.....	May 27-Sept. 23....	18	.....	Apr. 1-May 31, deaths 14.
St. Petersburg.....	May 21-Sept. 2.....	151	29	
Warsaw.....	Apr. 2-July 15....	64	35	
Windau.....	June 25-July 1.....	.....	.....	Present.
Siam:				
Bangkok.....	Apr. 16-Aug. 5....	100	94	
Siberia:				
Omsk.....	May 29-July 14....	3	.....	
Vladivostok.....	May 14-June 30....	12	5	
South Africa:				
Port Elizabeth.....	May 21-27.....	1	.....	
South Australia:				
Adelaide.....	Apr. 15.....	.....	.....	1 case from Colombo on s. s. Mooltan.
Spain:				
Barcelona.....	May 6-17.....	.....	4	
Madrid.....	June 1-July 31....	.....	2	
Malaga.....	do.....	.....	35	
Seville.....	June 1-Aug. 31....	.....	5	
Valencia.....	June 4-Sept. 16....	55	10	
Straits Settlements:				
Penang.....	Apr. 30-Aug. 12....	4	2	
Singapore.....	May 7-Aug. 19....	136	37	
Switzerland:				
Ticino, canton.....	May 28-June 3....	1	.....	
Turkey:				
Constantinople.....	June 4-Sept. 10....	.....	10	
Turkey in Asia:				
Beirut.....	May 27-Sept. 9....	72	20	
Kharput.....	May 21-June 10....	34	3	
Uruguay:				
Montevideo.....	Apr. 1-June 30....	38	10	
Zanzibar:				
Zanzibar.....	May 15-Aug. 6....	22	13	
At sea.....	May 15.....	1	.....	On s. s. Narrung; vessel quarantined at Adelaide, Melbourne, and Sydney.

## MORTALITY.

## WEEKLY MORTALITY TABLE, FOREIGN AND INSULAR CITIES.

Cities.	Week ended—	Estimated population.	Total deaths from all causes.	Deaths from—									
				Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Typhoid fever.	Scarlet fever.	Diphtheria.	Measles.
Aberdeen	Sept. 23	163,084	56								1	1	
Aden	Aug. 28	45,859	20	3									
Aix la Chapelle	Sept. 16	156,269	82	9					1			1	1
Amsterdam	Sept. 17	577,852	138	19						1			1
Do.	Sept. 23		127	15						2			6
Antwerp	Sept. 16	327,668	103	10						1			2
Athens	Aug. 26	250,010	51	16						1			
Do.	Sept. 9		83	21					3	2			
Manaos	Sept. 16	52,000	57	2			3						
Do.	Sept. 23		39	2			2						
Barcelona	Sept. 27	591,272	260	20						9			
Barranquilla	Sept. 23	40,000	12	1						1			
Basra	Sept. 9	20,000											
Do.	Sept. 15					21							
Batavia	Sept. 2	217,630				34							
Beirut	Sept. 16	80,000	20			5			1				
Do.	Sept. 23		25	2				3		5			
Belfast	do.	385,492	175	16				4		8			2
Do.	Sept. 30		125	13									1
Calcutta	Aug. 26	890,493	383	21	3	10					2	1	
Do.	Sept. 2		385	28	9	16							
Catania	Sept. 23	207,000		1		25							
Do.	Sept. 30		60	6		6			1				
Edinburgh	Sept. 23	320,829	93	9						1			
Erfurt	Sept. 16	124,399	42	5						1		1	
Frankfort on the Main	do.	414,800	98										
Gibraltar	Oct. 1	25,367	5							1			
Leith	Sept. 23	80,674	35									1	
Libau	Sept. 17	90,000								2			
Do.	Sept. 24								1		1		
London	Sept. 23	7,269,752	2,046						16	6	19	8	19
Lubeck	do.	99,000	28	1									1
Madras	Sept. 9	550,000	350			1		4		2		4	
Do.	Sept. 16		313					2		1			
Mexico	Sept. 2	719,052	310	19				2	8			1	4
Messina	Sept. 16	149,778	22	1		1							
Do.	Sept. 23		24	1						2			
Monterey	Oct. 1	100,000	47	5								1	
Odesa	Sept. 16	546,000	214	30					4	8	4	3	1
Palermo	Sept. 23	340,000	174	18				28		1	2		
Paris	do.	2,876,986	809	184					12	4	3	4	5
Patras	Sept. 24	40,000	12						4				
Saigon	Aug. 27	206,000	9		4	3		2					
Saloniki	Sept. 23	200,000				18							
San Luis	Sept. 2	87,946	72	5						1			4
Do.	Sept. 16		58	5					2				
Santa Cruz de Teneriffe	Sept. 9	46,000	11						1				
Do.	Sept. 16		13	2					1				
Do.	Sept. 23		8	1					1				
Sheffield	Sept. 16	454,653	123	7					1	1			1
Do.	Sept. 23		143	9								1	
Shanghai	Sept. 10	492,000	140	19									
Singapore	Aug. 19	303,328	248	28		4			5				
Do.	Aug. 26		200	29		1		2	4				
Do.	Sept. 2		213	26	1	7		1	2				
Southampton	Sept. 23	119,394	39	1								1	
Stettin	Sept. 9	234,033	113	6						2	4		
Do.	Sept. 16		97	7									
Do.	Sept. 23		107	11						1	2		
Tampico	Sept. 30	23,452	44					1					
Tarragona	Sept. 16	23,150	8	1					1				
Do.	Sept. 23		9	1					1				
Toronto	do.	392,000	117	5					2		3		1
Do.	Sept. 30		174	10					2			2	
Do.	Oct. 7		115	3					2		1		
Trieste	Sept. 23	230,820	113					2					
Tripoli	Aug. 26	42,000							1				



## MORTALITY—Continued.

Weekly mortality table, foreign and insular cities—Continued.

Cities.	Week ended—	Estimated population	Total deaths from all causes.	Deaths from—								
				Tuberculosis.	Plague.	Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Typhoid fever.	Scarlet fever.	Diphtheria.
Valencia.....	Sept. 23	240,000		2								
Do.....	Sept. 20		86	9				1		4		1
Victoria.....	Sept. 30	50,000	6							1		
Vienna.....	Sept. 17	2,047,968	565	73						2		3
Winnipeg.....	Sept. 30	151,958	36	4							1	
Yokohama.....	Sept. 18	419,630								2		

By authority of the Secretary of the Treasury:

WALTER WYMAN,

Surgeon General,

United States Public Health and Marine-Hospital Service.